

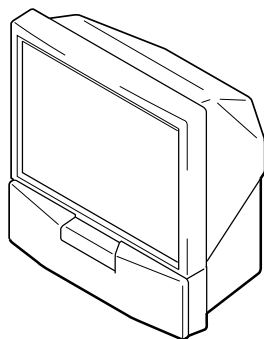
# SERVICE MANUAL

## RG-2 CHASSIS

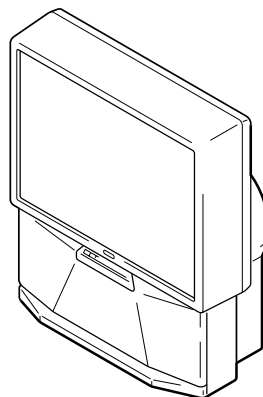
<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>	<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
KP-EF41ME3	RM-871	ME	SCC-N72G-A	KP-EF48MN3	RM-871	GE	SCC-N69H-A
KP-EF41MN3	RM-871	GE	SCC-N69G-A	KP-EF48SN3	RM-871	NZ	SCC-P55A-A
KP-EF41SN3	RM-871	AUS	SCC-N73G-A				



RM-871



KP-EF41ME3/EF41MN3/  
EF41SN3



KP-EF48MN3/EF48SN3

\* Please file according to model size. ... ☐

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48

PROJECTION TV  
**SONY**®

## SPECIFICATIONS


<b>Projection system</b>	3 picture tubes, 3 lenses, horizontal in-line system	<b>Stereo system</b>	NICAM stereo B/G, I, D/K
<b>Picture tube</b>	7 inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system	<b>Antenna</b>	75 ohm external antenna terminal
<b>Projection lenses</b>	High performance, large-diameter hybrid lens F1.0	<b>Audio output (Speaker)</b>	15 W × 2
<b>Screen size</b>	41 inches (KP-EF41) 48 inches (KP-EF48)	<b>Number of terminals</b>	
<b>Television system</b>	B/G, I, D/K, M	<b>Video</b>	Input: 4, Output: 1, phono jacks, 1 Vp-p, 75 ohms
<b>Color system</b>	PAL, PAL 60, SECAM, NTSC <sup>4.43</sup> , NTSC <sup>3.58</sup>	<b>Audio</b>	Input: 5, Output: 1, VARIABLE output: 1, phono jacks, 500 mVrms
<b>Channel coverage</b>	<b>B/G</b> VHF: E2 to E12 UHF: E21 to E69 CATV: S01 to S03, S1 to S41 <b>I</b> UHF: B21 to B68 CATV: S01 to S03, S1 to S41 <b>D/K</b> VHF: C1 to C12, R1 to R12 UHF: C13 to C57, R21 to R60 CATV: Z1 to Z39, S01 to S03, S1 to S41 <b>M</b> VHF: A2 to A13 UHF: A14 to A79 CATV: A-8 to A-2, A to W+4, W+6 to W+84	<b>S video</b>	Input: 2, Y:1 Vp-p, 75 ohms, unbalanced, sync negative, C:0.286 Vp-p, 75 ohms
		<b>Component video</b>	Input: 1, phono jacks Y:1.0 Vp-p, 75 ohms, sync negative Cb/B-Y: 0.7 Vp-p, 75 ohms Cr/R-Y: 0.7 Vp-p, 75 ohms Audio: 500 mVrms Output: 1, minijack
		<b>Headphone</b>	Output: 1, minijack
		<b>Power requirement</b>	110-240 V AC, 50/60 Hz
		<b>Power consumption</b>	160 W
		<b>Dimensions (w/h/d)</b>	948 × 992 × 511 mm (KP-EF41) 1,091 × 1,336 × 575 mm (KP-EF48)
		<b>Mass</b>	Approx. 43 kg (KP-EF41) Approx. 68 kg (KP-EF48)
		<b>Supplied accessories</b>	Remote commander RM-871 (1) Size R6 (AA) battery (2)
		<b>Optional accessories</b>	AV rack SU-EF41 (KP-EF41), SU-EF4853 (KP-EF48)

Design and specifications are subject to change without notice.

### CAUTION

SHORT CIRCUIT THE ANODE OF HTE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

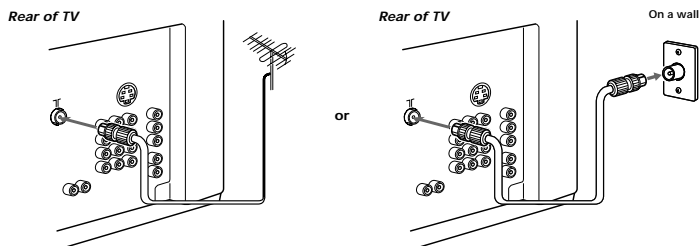
## SECTION1 GENERAL

### Getting Started

### Connections

#### Connecting a VHF antenna or a combination VHF/UHF antenna — 75-ohm coaxial cable (round)

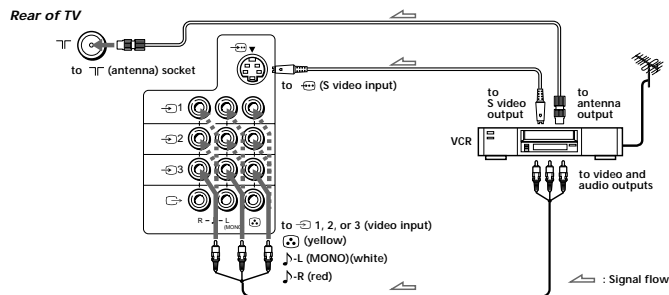
Attach an optional IEC antenna connector to the 75-ohm coaxial cable. Plug the connector into the  (antenna) socket at the rear of the TV.



#### Connecting optional equipment

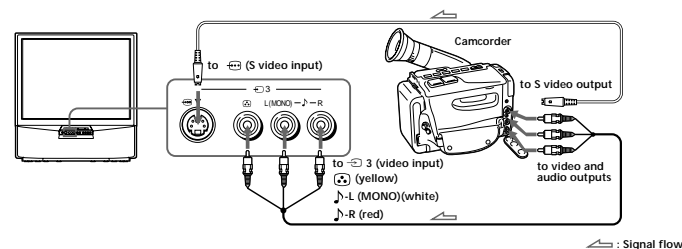
You can connect optional audio/video equipment to your TV such as a VCR, multi disc player, camcorder, video game or stereo system.

#### Connecting video equipment using video input jacks





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
Front of TV



#### When connecting a monaural VCR

Connect the yellow plug to  (video input) and the black plug to -L (MONO) (audio input).


#### When connecting video game equipment

Connect video game equipment to the  3 (video input) jacks at the front or the rear of your TV.


#### When connecting a VCR to the (antenna) terminal

Preset the signal output from the VCR to the program position 0.

#### When connecting video equipment to the 3 (video input) jacks at the front and the rear

Do not connect video equipment to the  3 (video input) jacks at the front and the rear of your TV simultaneously; otherwise the picture will not be displayed properly on the screen.


#### If both S Video and video signals are input simultaneously

The S video input signal is selected. To view a video input signal, disconnect the  (S video) connection.

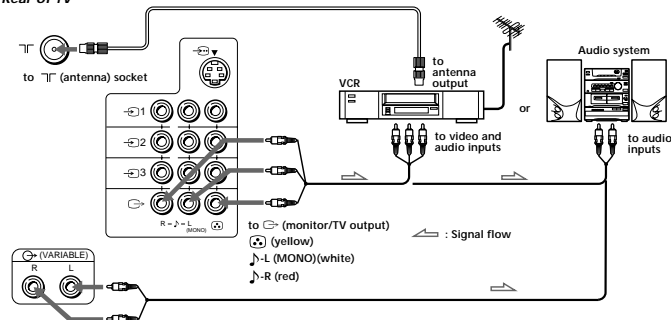
#### Note on the video input

When no signal is input, the screen becomes blue.

#### Connecting audio/video equipment using (monitor/TV output) jacks

When the audio cable is connected to the  (VARIABLE) jacks, you can adjust the volume with  +/-.

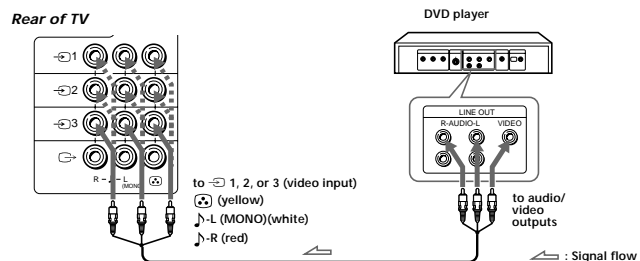
Rear of TV



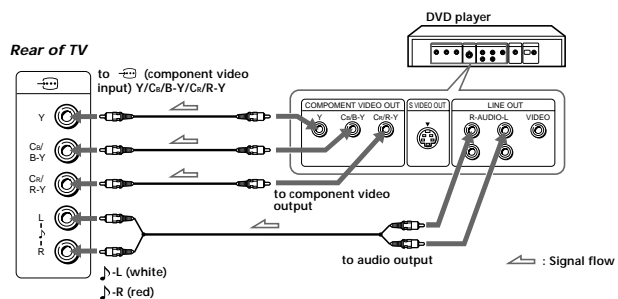
Getting Started | 7-EN



## Connecting a DVD player



## Connecting a DVD player with component video output connectors




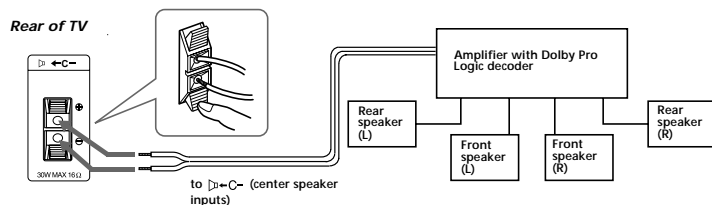
### Notes

- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust the sharpness (SHARP) in the VIDEO ADJUST menu. (See page 20.)
- Connect your DVD player directly to your TV. Connecting the DVD player through other video equipment will cause unwanted picture noise.

## Connecting an amplifier with Dolby® Pro Logic decoder

Even though you use an amplifier with Dolby Pro Logic decoder instead of the projection TV's audio system, you can still use the projection TV's center speaker.

\* Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

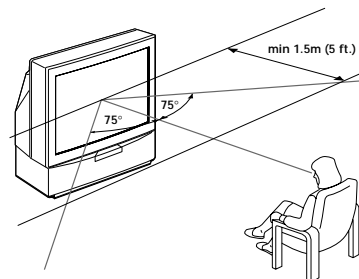


## Installing the projection TV

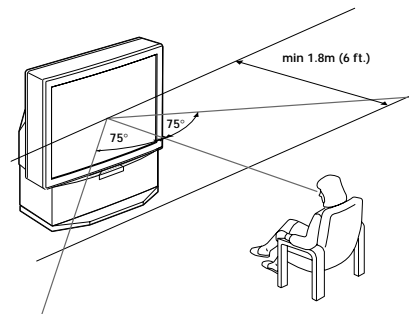
For the best picture quality, install the projection TV within the areas shown below.

### Optimum viewing area (Horizontal)

#### KP-EF41

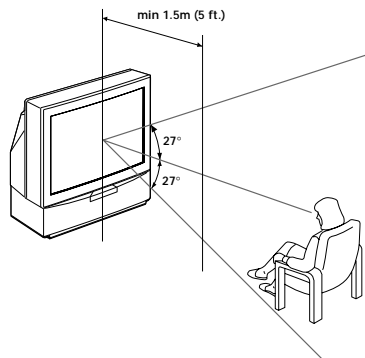


#### KP-EF48

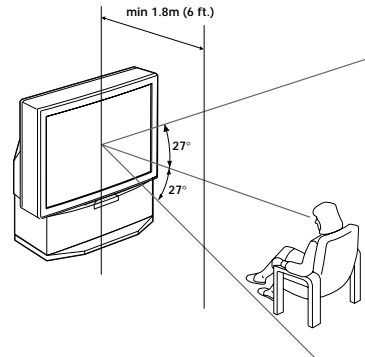


Optimum viewing area (Vertical)

KP-EF41



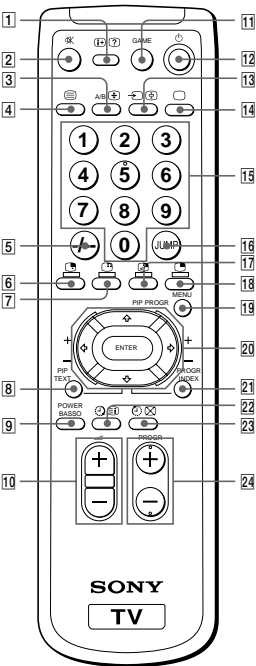
KP-EF48



Getting to know the remote commander

Names/symbols of buttons on the remote commander are indicated in different colors to represent the available functions.

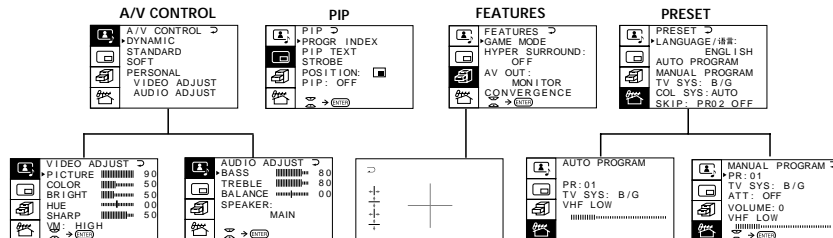
Label color	Button function
White	For general TV operations.
Green	For Teletext operations.
Yellow	For PIP and PROGRAM INDEX operations.



Symbol	Name	Refer to page
1	On-screen display button	19
2	Teletext: Reveal button	29
3	Mute on/off button	19
4	A/B	24
5	Sound select button	24
6	Teletext: Enlarge button	29
7	Teletext button	28
8	Double-digit entering button	18
9	Input select for PIP button	26
10	PIP freezing button	27
11	PIP TEXT	30
12	POWER	22
13	BASSO	22
14	VOLUME +/-	18
15	GAME	31
16	TV standby button	18
17	Input mode selector	19
18	Hold button	28
19	TV power on/TV mode selector	19
20	Number buttons	18
21	JUMP	19
22	Swapping picture button	27
23	PIP display button	26
24	MENU	12
25	Cursor control key	12
26	ENTER	12
27	PROGR INDEX	25
28	Wake up button (not in use for your model)	
29	Teletext: INDEX button	28
30	Sleep timer button	19
31	Teletext: Text clear button	29
32	PROGR +/-	18

## Introducing the menu system

You can preset TV channels, adjust the picture and sound qualities, and select some settings using the on-screen menus. You can use the buttons on both the remote commander and the TV to operate the menus.



### Getting back to the previous menu (except for AUTO PROGRAM)

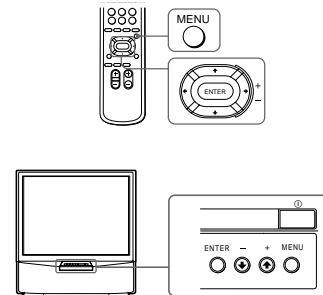
Press **←** or **→** to move the cursor (▶) to the first line (□) of each menu, and press **ENTER**.

### Cancelling the menu screen

Press **MENU**.

## Changing the menu language

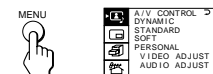
If you prefer Chinese (for MN3 model)/ Arabic (for ME3 model) to English, you can change the menu language. You can use buttons on both the remote commander and the TV.



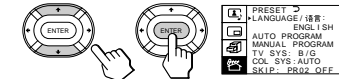
1 Press ① to turn on the TV.



2 Press **MENU**.



3 Press **↑** or **↓** to move the cursor (▶) to the PRESET menu (PRESET), and press **ENTER**.



4 Make sure the cursor (▶) appears beside **LANGUAGE/ 语言 (اللغة)**, and press **ENTER**.

5 Press **↵/↵/↵** to select **中文 (عربي)**, and press **ENTER**.

All of the menus change to Chinese (Arabic).

6 Press **MENU** to return to the normal screen.

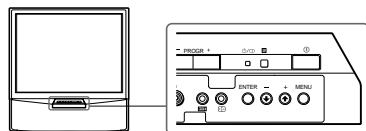


## Presetting channels

You can preset TV channels easily by storing all the receivable channels automatically. You can also preset channels manually or disable program positions (see page 16 ).

### Presetting channels automatically

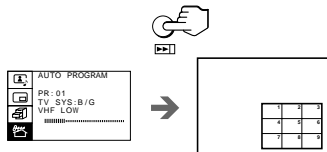
You can preset up to 100 TV channels in numerical sequence from the program position 1. You can preset channels automatically using the button on the TV or the menu.



- 1 Press ① to turn on the TV.



- 2 Press .




The TV starts scanning and presetting channels automatically. When all of the receivable channels are stored, the AUTO PROGRAM menu disappears and the first nine preset TV programs appear on the nine sub screens. The nine sub screens disappear after being displayed for several seconds.

#### Note

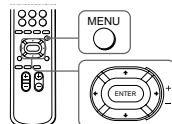
- If you want to return to the normal screen while the nine sub screens are being displayed, you can press PROGR INDEX on the remote commander.

### To preset channels automatically using the menu

- 1 Press MENU.
- 2 Press  $\blacktriangle$  or  $\blacktriangledown$  to move the cursor ( $\blacktriangleright$ ) to the PRESET menu () , and press ENTER.
- 3 Press  $\blacktriangle$  or  $\blacktriangledown$  to move the cursor ( $\blacktriangleright$ ) to AUTO PROGRAM, and press ENTER.


### Presetting channels manually

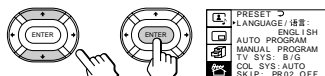
To change the program position for a channel or to receive a channel with a weak signal which you cannot receive by automatic presetting, preset the channel manually.



- 1 Press MENU.



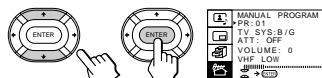
- 2 Press  $\blacktriangle$  or  $\blacktriangledown$  to move the cursor ( $\blacktriangleright$ ) to the PRESET menu () , and press ENTER.



- 3 Select your local TV system.

- (1) Press  $\blacktriangle$  or  $\blacktriangledown$  to move the cursor ( $\blacktriangleright$ ) to TV SYS, and press ENTER.
- (2) Press  $\blacktriangle$ / $\blacktriangledown$ / $\blacktriangleright$ / $\blacktriangleleft$  until your local TV system appears on the menu, and press ENTER.

- 4 Press  $\blacktriangle$  or  $\blacktriangledown$  to move the cursor ( $\blacktriangleright$ ) to MANUAL PROGRAM, and press ENTER.



- 5 Select the program position to which you want to preset a channel.

- (1) Make sure the cursor ( $\blacktriangleright$ ) appears beside PR, and press ENTER.
- (2) Press  $\blacktriangle$ / $\blacktriangledown$ / $\blacktriangleright$ / $\blacktriangleleft$  until the program position you want appears on the menu, and press ENTER.

- 6 Select the desired channel.

- (1) Press  $\blacktriangle$  or  $\blacktriangledown$  to move the cursor ( $\blacktriangleright$ ) to VHF LOW (VHF Hi or UHF), and press ENTER.
- (2) Press  $\blacktriangle$ / $\blacktriangledown$ / $\blacktriangleright$ / $\blacktriangleleft$  until the desired channel picture appears on the TV screen, and press ENTER.

- 7 Press MENU to return to the normal screen.

#### If the TV system is not properly selected

The picture color may be poor and/or the sound may be noisy. In this case, select the appropriate TV system.

- 1 Press PROGR +/- or the number buttons to select the program position.
- 2 Display the PRESET menu.
- 3 Press  $\blacktriangle$  or  $\blacktriangledown$  to move the cursor ( $\blacktriangleright$ ) to TV SYS, and press ENTER.
- 4 Press  $\blacktriangle$ / $\blacktriangledown$ / $\blacktriangleright$ / $\blacktriangleleft$  until the appropriate TV system appears, and press ENTER.

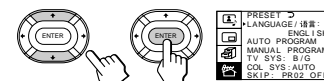
#### Notes

- The TV SYS (TV system), the ATT (attenuator), and the VOLUME (volume offset) settings are memorized for each program position.
- If you do not know your local TV system, consult your nearest Sony dealer or authorized service center.

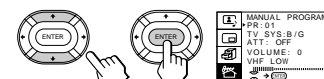
### Attenuating the signal for individual programs

If the TV signal is too strong, the picture may be distorted. You can reduce the picture distortion by attenuating the signal individually.

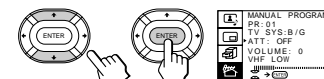
- 1 Display the PRESET menu.



- 2 Press  $\blacktriangle$  or  $\blacktriangledown$  to move the cursor ( $\blacktriangleright$ ) to MANUAL PROGRAM, and press ENTER.



- 3 Press  $\blacktriangle$  or  $\blacktriangledown$  to move the cursor ( $\blacktriangleright$ ) to ATT, and press ENTER.



- 4 Press  $\blacktriangle$ / $\blacktriangledown$ / $\blacktriangleright$ / $\blacktriangleleft$  to select ON, and press ENTER.

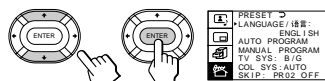
## Disabling program positions

By disabling unused or unwanted program positions, you can skip those positions when you press PROG +/-..

### 1 Press MENU.



### 2 Press + or - to move the cursor (▶) to the PRESET menu (PRESET), and press ENTER.



### 3 Press + or - to move the cursor (▶) to SKIP, and press ENTER.

### 4 Press + or - until the unused or unwanted program position appears on the menu, and press ENTER.

### 5 Press +/+/+ to select ON, and press ENTER.

### 6 To disable other program positions, repeat steps 4 and 5.

### 7 Press MENU to return to the normal screen.

#### To cancel the skip setting

- 1 Display the PRESET menu.
- 2 Press + or - to move the cursor (▶) to SKIP, and press ENTER.
- 3 Press + or - until the program position you want to cancel the skip setting appears, and press ENTER.
- 4 Press +/+/+ to select OFF, and press ENTER.

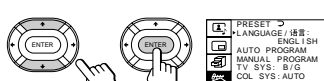
## Presetting the volume level for individual programs

If the volume of the selected program is louder than that of other programs, set the volume level.

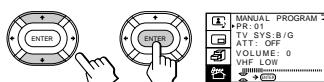
### 1 Press MENU.



### 2 Press + or - to move the cursor (▶) to the PRESET menu (PRESET), and press ENTER.



### 3 Press + or - to move the cursor (▶) to MANUAL PROGRAM, and press ENTER.



### 4 Press + or - to move the cursor (▶) to VOLUME, and press ENTER.

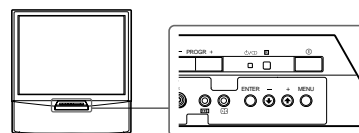
### 5 Press +/+/+ to set the level, and press ENTER.

The level can be set as 0, -1, -2, ....-6 (minimum).

## Adjusting the convergence (CONVERGENCE)

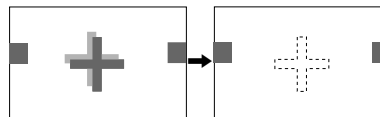
Before you use the projection TV, adjust convergence. The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs. To correct this, adjust convergence. After 20-30 minutes of turning on the power, adjust convergence.

### Adjusting the convergence automatically



#### Press [PROGR] on the TV.

The auto convergence function works for about 30 seconds.

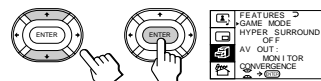


### Adjusting the convergence manually

When the auto convergence function does not work correctly with [PROGR], adjust convergence by selecting CONVERGENCE of the FEATURES menu.

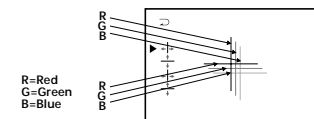
### 1 Press MENU.

### 2 Press + or - to move the cursor (▶) to the FEATURES menu (FEATURES), and press ENTER.

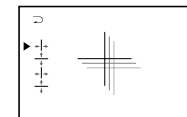


### 3 Press + or - to move the cursor (▶) to CONVERGENCE and press ENTER.

The CONVERGENCE adjustment screen appears.

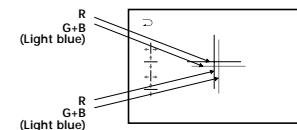


### 4 Press + or - to move the cursor (▶) to the symbol showing the line you want to adjust, and press ENTER.



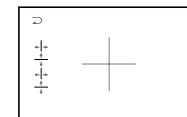
- + : Red vertical line (left/right adjustment)
- + : Red horizontal line (up/down adjustment)
- : Blue vertical line (left/right adjustment)
- + : Blue horizontal line (up/down adjustment)

### 5 Press + or - to move the line until it converges with the center green line, and press ENTER.



To move up/right, press +.  
To move down/left, press -.

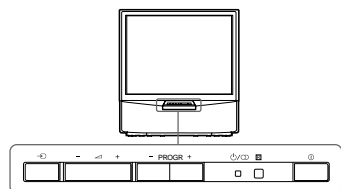
### 6 Repeat steps 4 and 5 to adjust the other lines until all three lines converge and are seen as a white cross.



### 7 Press MENU to return to the normal screen.

## Operations

### Watching the TV



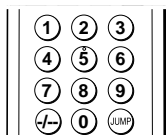
- 1 Press to turn on the TV.



When the TV is turned on in the standby mode, the indicator on the TV lights up. To turn on the TV completely, press on the remote commander or the TV.

- 2 Select the TV program you want to watch.

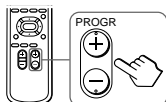
**To select a program position directly**  
Press the number button.



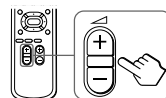
To select a two-digit program position, press “+” before the number buttons.  
For example: to select program position 25, press “+”, “2” then “5.”



**To scan through program positions**  
Press PROG +/– on the remote commander or the TV until the program position you want appears.

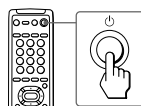


- 3 Press on the remote commander or the TV to adjust the volume.



### Turning off the TV

**To turn off the TV temporarily**  
Press on the remote commander. The indicator lights up.

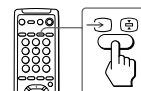


**To turn off the TV completely**  
Press on the TV.



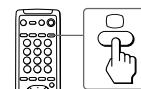
### Watching the video input

Press on the remote commander or on the TV.



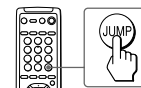
### To watch TV

Press on the remote commander or on the TV.



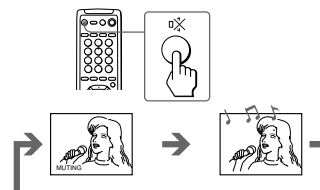
### Switching back quickly to the previous channel

Press JUMP.



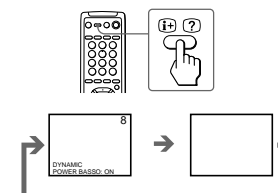
### Muting the sound

Press .



### Displaying the on-screen information

Press .



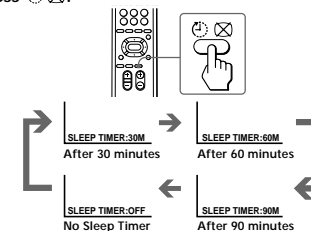
### Note

- The on-screen display shows the program position or the video mode, the picture and sound information. The on-screen display for the picture and sound information disappears after being displayed for approximately three seconds.

### Setting the Sleep Timer

You can set the TV to turn off automatically after the period of time you want.

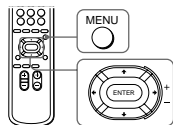
Press .



To cancel the Sleep Timer, press repeatedly until “SLEEP TIMER: OFF” appears, or turn the TV off.

# Adjusting the picture and sound

## Selecting the picture and sound modes

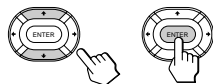


1 Press MENU.



2 Make sure the cursor (►) appears in the A/V CONTROL menu (A), and press ENTER.

3 Press ▲ or ▼ to move the cursor (►) to DYNAMIC, STANDARD, SOFT, or PERSONAL, and press ENTER.



Select	To
DYNAMIC	Receive high contrast picture with powerful sound.
STANDARD	Receive normal contrast picture with medium listening sound.
SOFT	Receive mild picture with soft sound.
PERSONAL	Receive the last picture and sound settings that are adjusted using VIDEO ADJUST and AUDIO ADJUST.

4 Press MENU to return to the normal screen.



## Adjusting the picture settings (VIDEO ADJUST)

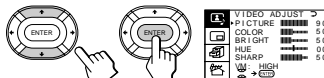
You can adjust the picture settings to suit your taste with the VIDEO ADJUST option. The adjusted settings are stored in the PERSONAL option.

1 Press MENU.



2 Make sure the cursor (►) appears in the A/V CONTROL menu (A), and press ENTER.

3 Press ▲ or ▼ to move the cursor (►) to VIDEO ADJUST, and press ENTER.



4 Press ▲ or ▼ to move the cursor (►) to the item you want to adjust, and press ENTER.

5 Press ▲/▼/◀/▶ to adjust the selected item, and press ENTER.

For details on each item, see "Description of adjustable items" below.

6 To adjust other items, repeat steps 4 and 5.

7 Press MENU to return to the normal screen.

### Description of adjustable items

Item	Press ▲/▼	Press ▲/▼
PICTURE	Decrease picture contrast.	Increase picture contrast.
COLOR	Decrease color intensity.	Increase color intensity.
BRIGHT	Darken the picture.	Brighten the picture.
HUE	Make picture tones become reddish.	Make picture tones become greenish.
SHARP	Soften the picture.	Sharpen the picture.
VM	Decrease emphasis on picture edges.	Increase emphasis on picture edges.

#### Note

- You can adjust HUE for the NTSC color system only. (Note that you can't adjust the NTSC color system of the component inputs.)

### If the picture is slightly snowy

You may try to improve the picture by changing the VM setting as described below:

- Display the VIDEO ADJUST menu.
- Press ▲ or ▼ to move the cursor (►) to VM, and press ENTER.
- Press ▲/▼/◀/▶ to select LOW, and press ENTER.

### If the picture color is abnormal when receiving programs through the ㊦ (antenna) terminal

Change the color system or the TV system from the PRESET menu as described below until the color becomes normal.

- Display the PRESET menu.
- Press ▲ or ▼ to move the cursor (►) to COL SYS or TV SYS, and press ENTER.
- Press ▲/▼/◀/▶ to change the color system or the TV system until the color becomes normal, and press ENTER.

#### Note

- Normally set the color system (COL SYS) to AUTO.

## Adjusting the sound settings (AUDIO ADJUST)

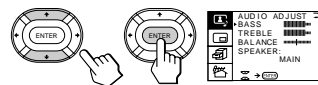
You can adjust the sound settings to suit your taste with the AUDIO ADJUST option. The adjusted settings are stored in the PERSONAL option.

1 Press MENU.



2 Make sure the cursor (►) appears in the A/V CONTROL menu (A), and press ENTER.

3 Press ▲ or ▼ to move the cursor (►) to AUDIO ADJUST, and press ENTER.



4 Press ▲ or ▼ to move the cursor (►) to the item you want to adjust, and press ENTER.

5 Press ▲/▼/◀/▶ to adjust the selected item, and press ENTER.

For details on each item, see "Description of adjustable items" below.

6 To adjust other items, repeat steps 4 and 5.

7 Press MENU to return to the normal screen.

### Description of adjustable items

Item	Press ▲/▼	Press ▲/▼
BASS	Decrease the bass sound.	Increase the bass sound.
TREBLE	Decrease the treble sound.	Increase the treble sound.
BALANCE	Increase the left speaker's volume	Increase the right speaker's volume.

### If the sound is distorted or noisy when receiving programs through the ㊦ (antenna) terminal

Change the TV system from the PRESET menu as described below until the sound becomes normal.

- Display the PRESET menu.
- Press ▲ or ▼ to move the cursor (►) to TV SYS, and press ENTER.
- Press ▲/▼/◀/▶ to change the TV system until the sound becomes normal, and press ENTER.

## Setting the speaker

If you connect a Dolby Pro Logic-compatible amplifier to the center speaker terminals, you can use the projection TV speakers as center speakers.

### 1 Press MENU.



### 2 Make sure the cursor (►) appears in the A/V CONTROL menu (A), and press ENTER.

### 3 Press ▲ or ▼ to move the cursor (►) to AUDIO ADJUST, and press ENTER.



### 4 Press ▲ or ▼ to move the cursor (►) to SPEAKER, and press ENTER.



### 5 Press ▲/▼/◀/▶ to set the speaker, and press ENTER.

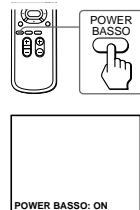
To use the projection TV speakers as center speakers, select CENTER IN.  
To listen to the sound from a projection TV, select MAIN.

### 6 Press MENU to return to the normal screen.

## Listening with dynamic sound (POWER BASSO)

The POWER BASSO sound mode enables you to enjoy a high quality sound with the best combination of all types of sound. It reproduces dynamic and clear sounds and emphasizes low and high audio effects as well.

### Press POWER BASSO.



The sound mode of the TV program or the video input changes to the POWER BASSO sound.

### To cancel the POWER BASSO mode

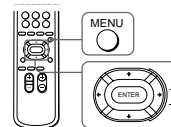
Press POWER BASSO again.

### Note

- You can select any of the surround sound modes (HYPER SURROUND) to cancel the POWER BASSO sound.

## Listening to the surround sound (HYPER SURROUND)

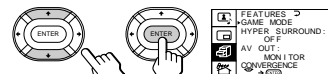
The HYPER SURROUND feature enables you to enjoy a surround sound effect that is like being in a concert hall or movie theater when receiving stereo signals.



### 1 Press MENU.

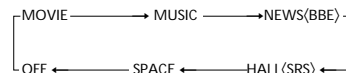


### 2 Press ▲ or ▼ to move the cursor (►) to the FEATURES menu (A), and press ENTER.



### 3 Press ▲ or ▼ to move the cursor (►) to HYPER SURROUND, and press ENTER.

### 4 Press ▲/▼/◀/▶ to select MOVIE, MUSIC, NEWS(BBE), HALL(SRS) or SPACE, and press ENTER.



For details on each item, see "Description of adjustable items" below.

### 5 Press MENU to return to the normal screen.

### Description of adjustable items

Select	To
MOVIE	Listen to a sound that emphasizes the bass audio effect of movie theater.
MUSIC	Listen to a dynamic and clear sound that emphasizes the low and high audio sounds.
NEWS(BBE)	Listen to a sound that emphasizes voice.
HALL(SRS)	Listen to a sound that spreads out over a large area, giving the feeling of being at a concert hall.
SPACE	Listen to a monaural sound that gives a stereo-like effect.
OFF	Turn off the surround sound.

### Notes


- The BBE is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and the BBE symbol are the trademarks of BBE Sound, Inc.
- The (●) SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. The word "SRS" and the SRS symbol (●) are registered trademarks of SRS Labs, Inc.

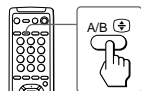


## Selecting a stereo or bilingual program

You can enjoy stereo sound or bilingual programs of NICAM and A2 (German) stereo systems.

Press A/B repeatedly until you receive the sound you want.

The on-screen display changes corresponding to the selected sound and the  indicator also lights up.



### When receiving a NICAM program

Broadcasting	On-screen display (Selected sound)
NICAM stereo	<div> <div>NICAM (Stereo sound)</div> <div>→</div> <div>MONO (Regular sound)</div> </div>
NICAM bilingual	<div> <div>NICAM MAIN (Main sound)</div> <div>→</div> <div>NICAM SUB (Sub sound)</div> <div>→</div> <div>MONO (Regular sound)</div> </div>
NICAM monaural	<div> <div>NICAM MAIN (Main sound)</div> <div>→</div> <div>MONO (Regular sound)</div> </div>

### When receiving an A2 (German) program


Broadcasting	On-screen display (Selected sound)
A2 (German) stereo	<div> <div>MONO (Regular sound)</div> <div>→</div> <div>STEREO (Stereo sound)</div> </div>
A2 (German) bilingual	<div> <div>MAIN (Main sound)</div> <div>→</div> <div>SUB (Sub sound)</div> </div>


### Receiving area for NICAM and A2 (German) programs

System	Receiving area
NICAM	Hong Kong, Singapore, New Zealand, Malaysia, Thailand, etc.
A2 (German)	Australia, Malaysia, Thailand, etc.

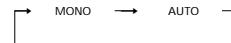
#### Notes

- If the signal is very weak, the sound becomes monaural.
- If the stereo sound is noisy when receiving a NICAM program, select "MONO." The sound becomes monaural, but the noise is reduced.

If the sound is distorted or noisy when receiving a monaural program through the  (antenna) terminal

Press A/B repeatedly until "MONO" appears on the screen while the  indicator is off.

To cancel the monaural sound setting, press A/B again until "AUTO" appears on the screen.



#### Notes

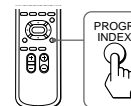
- The "MONO" or "AUTO" setting memorized for each program position.
- You cannot receive stereo broadcast signal when the TV is in the "MONO" setting.

## Viewing multiple programs at the same time (PROGRAM INDEX)

The PROGRAM INDEX feature allows you to view all the preset TV programs and the video inputs on the nine sub screens at the same time.

You can view multiple programs on the nine sub screens using the button on the remote commander or the menu.

Press PROGR INDEX.



The first nine preset programs appear on the nine sub screens.

>>> 1	2	3
4	5	6
7	8	9

To view the next or the previous nine preset programs on the nine sub screens


Press PROGR +/- on the remote commander or the TV.


>>> 10	11	12
V1	V2	V3
1	2	3

↔


>>> 1	2	3
4	5	6
7	8	9

To select the program you want to watch directly after viewing multiple programs

Press the number buttons, , or press

/♦/♦/♦ to move the cursor (>>>) to the screen of the program you want to watch, and press ENTER.

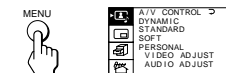
### To restore the normal screen

Press PROGR INDEX again or .

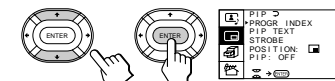
You can also select PROGR INDEX or PIP : OFF from the PIP menu, and press ENTER to restore the normal screen.

### To view multiple programs on the nine sub screens using the menu

#### 1 Press MENU.



#### 2 Press + or - to move the cursor (▶) to the PIP menu ( ), and press ENTER.



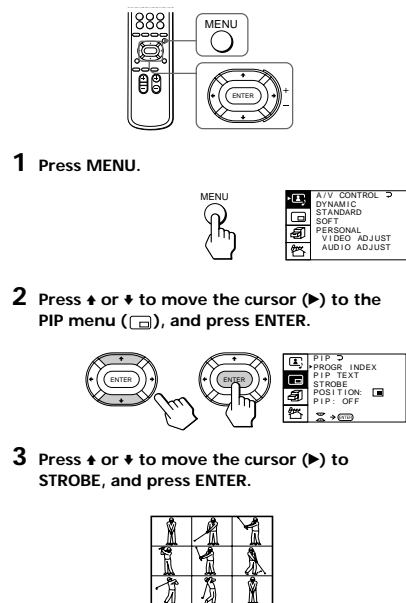
#### 3 Make sure the cursor (▶) appears beside PROGR INDEX, and press ENTER.

#### Notes

- You can change the position of the nine sub screens using the PIP menu (see "Changing the position of the PIP screen" on page 27).
- You can hear the sound of the main screen when viewing multiple programs on the nine sub screens.
- You can use the number buttons on the remote commander to change the program position of the main screen when viewing multiple programs on the nine sub screens.

## Displaying frame-by-frame pictures (STROBE)

You can watch a slow motion movement of the main screen picture which is displayed frame-by-frame on the nine sub screens.



### To restore the normal screen

Select STROBE again or PIP : OFF from the PIP menu, and press ENTER.

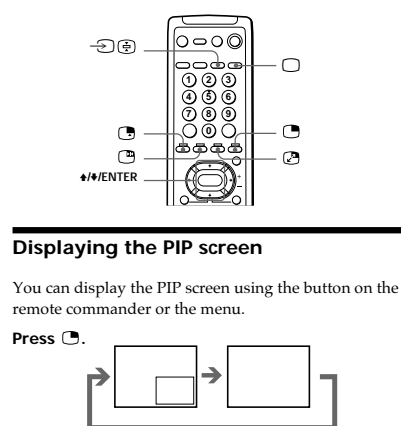
You can also press , , , , or to restore the normal screen.

#### Notes

- You can change the position of the nine sub screens using the PIP menu (see "Changing the position of the PIP screen" on page 27).
- You can hear the normal sound when using the STROBE feature.

## Using the Picture-in-Picture (PIP) features

With the Picture-in-Picture (PIP) feature, you can display a sub screen within the main picture of different TV programs or video inputs.



### Selecting a TV program or video input in the PIP screen

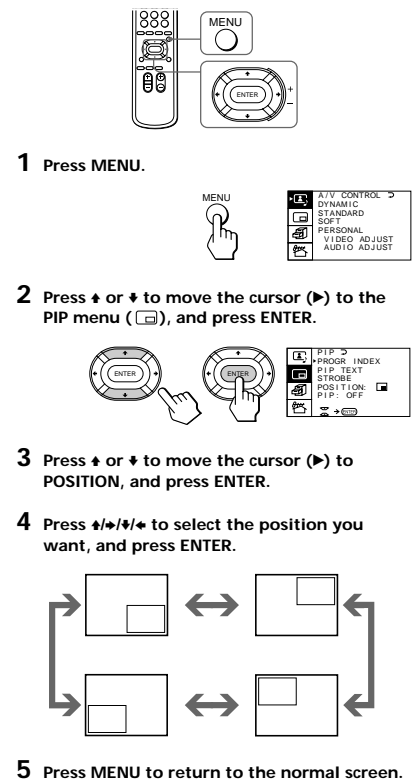
To select a TV program, press or , and press ENTER.

To select a video input, press on the remote commander or on the TV.

### To display the PIP screen using the menu

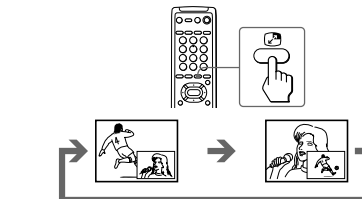
- Press MENU.
- Press or to move the cursor (▶) to the PIP menu (), and press ENTER.
- Press or to move the cursor (▶) to PIP, and press ENTER.
- Press or to select ON, and press ENTER.
- Press MENU to return to the normal screen.

## Changing the position of the PIP screen



## Swapping pictures between the main and PIP screens

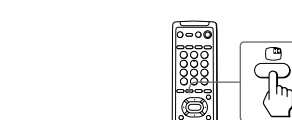
Press .



## Freezing the PIP screen

Press .

The PIP screen will freeze.



## To restore the normal screen

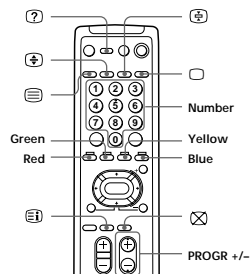
Press again.

#### Notes

- When you display a video input on the PIP screen at any speed other than the normal one, the picture may be disrupted, depending on the VCR.
- If you display different color systems on the main screen and the PIP screen, the size of the PIP screen may be different and the PIP picture may be disrupted. This does not indicate a malfunction of the TV.

## Viewing Teletext

TV stations broadcast an information service called Teletext via a TV channel. Teletext service allows you to receive various information such as weather forecasts or news at any time.



### Displaying Teletext

- 1 Select a TV channel that carries the Teletext broadcast you want to watch.
- 2 Press **Teletext** to display the Teletext. A Teletext page (normally the index page) is displayed. If there is no Teletext broadcast, "100" is displayed at the top left corner of the screen.

#### To turn off Teletext

Press **Teletext**.

### Superimposing a Teletext page on the TV picture

Press **Teletext**. Each time you press **Teletext**, the screen changes as follows:



### Checking the contents of a Teletext service (INDEX)

Press **Teletext** to display an overview of the Teletext contents and page numbers.

### Using FASTEXT

This feature allows you to quickly access a Teletext page that uses FASTEXT. When a FASTEXT program is broadcasted, the colored menus appear at the bottom of the screen. The colors of the menus correspond to the red (**Red**), green (**Green**), yellow (**Yellow**), and blue (**Blue**) colored-coded buttons on the remote commander.

#### To access a FASTEXT menu

Press the color-coded button on the remote commander that corresponds to the colored menu which appears at the bottom of the screen. The menu page appears on the screen after several seconds.

### Selecting a Teletext page

Press the number buttons to enter the three-digit page number of the Teletext page you want.

If you make a mistake, re-enter the correct page number.

#### To access the next or previous page

Press **PROGR +/-**.

You can also access a Teletext page of any page numbers that appear in the colored column at the bottom of the screen using the corresponding color-coded button on the remote commander.

### Holding a Teletext page (HOLD)

A Teletext page may consist of several subpages. You can stop the page scrolling in order to read the text at your own pace.

Press **HOLD**.

The HOLD symbol "**HOLD**" appears at the top left corner of the screen.

#### To resume normal Teletext operation

Press **Teletext** again or **Teletext**.

### Revealing concealed information (REVEAL)

The REVEAL option lets you disclose concealed information, such as an answer to a quiz that you find on some of the Teletext pages.

Press **REVEAL**.

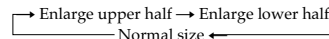
#### To conceal the information

Press **REVEAL** again.

### Enlarging the Teletext display (ENLARGE)

Press **ENLARGE**.

Each time you press **ENLARGE**, the Teletext display changes as follows:



### Waiting for a Teletext page while watching a TV program (TEXT CLEAR)

- 1 Enter the page number of the Teletext that you want to refer to, then press **Teletext**.
- 2 When the page number is displayed on the screen, press **Teletext** to turn on the Teletext.

## Displaying Teletext on the PIP screen (PIP TEXT)

The PIP TEXT feature enables you to display a Teletext page on the PIP screen while watching a TV program.

You can display the Teletext on the PIP screen using the button on the remote commander or the menu.

- 1 Select a TV channel that carries the Teletext broadcast you want to watch.

- 2 Press PIP TEXT.

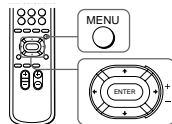


### To restore the normal screen

Press PIP TEXT again, or press  $\square$ ,  $\rightarrow$  (3), or PROGR +/-.

You can also select PIP : OFF from the PIP menu, and press ENTER to restore the normal screen.

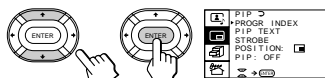
To display a Teletext page on the PIP screen using the menu



- 1 Press MENU.



- 2 Press  $\uparrow$  or  $\downarrow$  to move the cursor ( $\blacktriangleright$ ) to the PIP menu (3), and press ENTER.



- 3 Press  $\uparrow$  or  $\downarrow$  to move the cursor ( $\blacktriangleright$ ) to PIP TEXT, and press ENTER.

- 4 Press  $\leftarrow/\rightarrow/\uparrow/\downarrow$  to select the Teletext page you want to watch.

### Notes

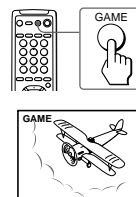
- You can also use the color-coded buttons (see page 28) while displaying a Teletext page on the PIP screen.
- To select a Teletext page on the PIP screen, press  $\leftarrow/\rightarrow/\uparrow/\downarrow$  once only. If you press  $\leftarrow/\rightarrow/\uparrow/\downarrow$  continuously, the Teletext page numbers also change continuously at a fast speed.
- You can change the position of a Teletext page on the PIP screen using the PIP menu (see "Changing the position of the PIP screen" on page 27).

## Viewing a video game screen (GAME MODE)

The GAME MODE feature optimizes the video game screen by giving a soft picture and dynamic sound effect.

You can display a video game screen using the button on the remote commander or the menu.

Press GAME.



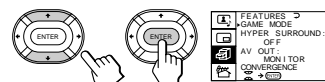
The picture and sound change to the mode that is suitable for video games.

To view a video game screen using the menu

- 1 Press MENU.



- 2 Press  $\uparrow$  or  $\downarrow$  to move the cursor ( $\blacktriangleright$ ) to the FEATURES menu (3), and press ENTER.



- 3 Make sure the cursor ( $\blacktriangleright$ ) appears beside GAME MODE, and press ENTER.

To restore the normal picture and sound modes



Press  $\square$ ,  $\rightarrow$  (3), or PROGR +/-.

### Notes

- If you press the GAME button when the TV is in the standby mode, the TV turns on automatically and the picture and sound change to the mode that is suitable for video games.
- To display a video game screen, connect the video game equipment to the  $\rightarrow$  3 (video input) jacks at the front or the rear of the TV.

## Customizing the TV

### Using the AV OUT (advanced rec-out) terminal

You can select the output signal from the  (monitor/TV output) jacks at the rear of the TV. However, the signals of the PROGRAM INDEX, STROBE, PIP modes, the signals from the  (component video input) jacks, and the Teletext broadcast cannot be output even though MONITOR is selected.

#### 1 Press MENU.



#### 2 Press or to move the cursor (►) to the FEATURES menu () and press ENTER.





#### 3 Press or to move the cursor (►) to AV OUT, and press ENTER.

#### 4 Press , , , or to select the output signal, and press ENTER.

Select	To
TV	Output the signal of the TV broadcast.
MONITOR	Output the signal of the picture you are watching as a main picture.

#### Notes

- Do not change the channel while recording with a VCR through the  (monitor/TV output) jacks. If you change the channel, it also changes the channel you are recording.
- When the signals from the  (component video input) jacks are displayed on the main screen, the signals can't be output even though MONITOR is selected.

## Additional Information

## Troubleshooting

If you have any problems, read this manual again and check the countermeasure for each of the symptoms listed below.  
If the problem persists, contact your nearest Sony dealer or authorized service center.

### Snowy picture Noisy sound



- Check the antenna.
- Check the antenna connection on the TV and on the wall.
- Check the TV system (TV SYS) setting.
- Check the ATT (attenuator) setting.

### Dotted lines or stripes



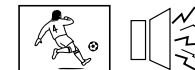
- This may be caused by local interference (e.g. cars, neon signs, hair dryers, etc.). Adjust the antenna for minimum interference.

### Double images or "ghosts"



- This may be caused by reflections from nearby mountains or buildings. A highly directional antenna may improve the picture.



### Good picture Noisy sound



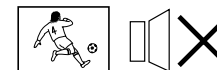
- Check the TV system (TV SYS) setting.




### No picture No sound



- Press .
- Press  to turn off the TV for about five seconds and then turn it on again.
- Check the power cord connection.
- Check the antenna connection.
- Check the VCR connections.

### Good picture No sound




- Press .
- If "CENTER IN" is displayed on the screen, select "SPEAKER: MAIN" of the AUDIO ADJUST menu.
- Press .
- Press A/B .

### No color



- Adjust the COLOR level in the VIDEO ADJUST menu of the PERSONAL option.
- Check the color system (COL SYS) setting.

### TV cannot receive stereo broadcast signal

- Press A/B  until "AUTO" appears on the screen.

### TV cabinet creaks

- Even if the picture or the sound is normal, changes in the room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.

Additional Information 33-EN

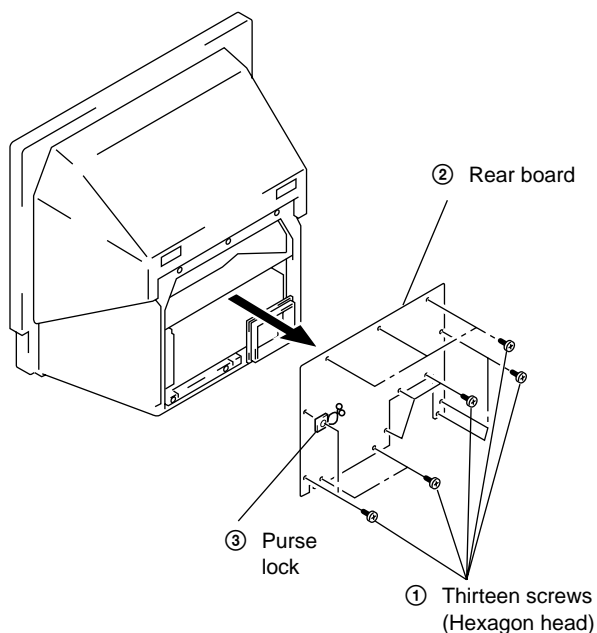
# Cleaning the screen

- To clean the screen with a cloth, please use a soft cloth lightly moistened with a mild detergent solution or water.  
Do not use any type of abrasive pad, alkaline cleaner, scouring powder or solvent, such as alcohol or benzine, or anti static spray.  
As a safety precaution, unplug the TV before cleaning it.
- Do not rub, touch, or tap the surface of the screen with sharp or abrasive items, like a ball point pen or a screw driver.  
Otherwise, this type of contact may result in a scratched screen.

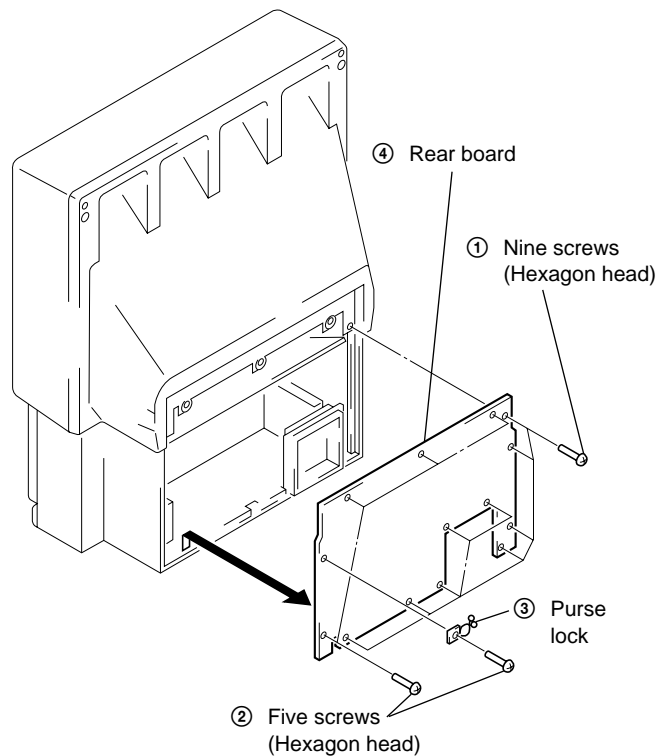
## SECTION 2 DISASSEMBLY

### 2-1. REAR BOARD REMOVAL

• KP-EF41

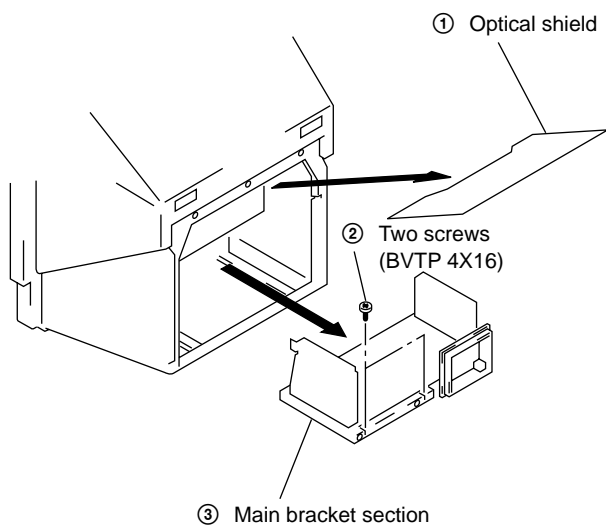


• KP-EF48

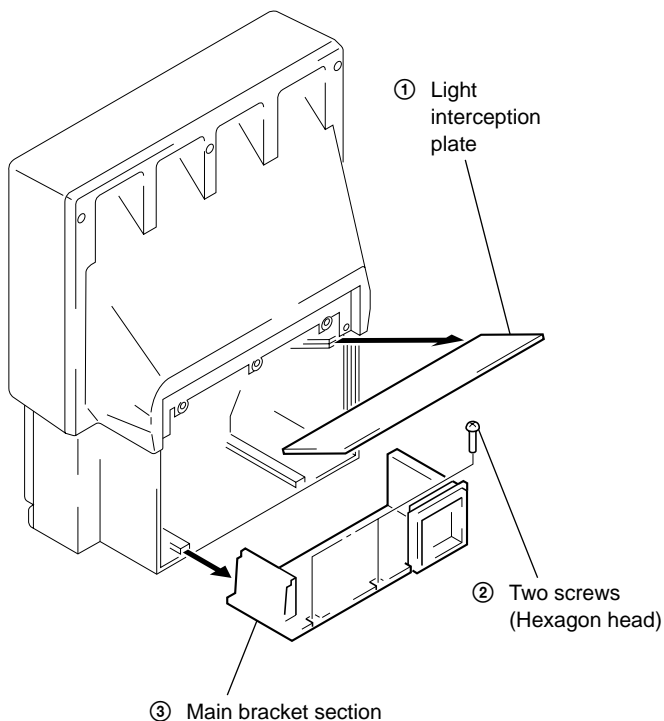


### 2-2. MAIN BRACKET SECTION REMOVAL

• KP-EF41

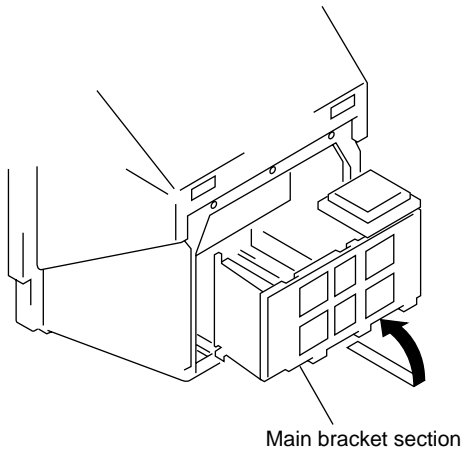


• KP-EF48

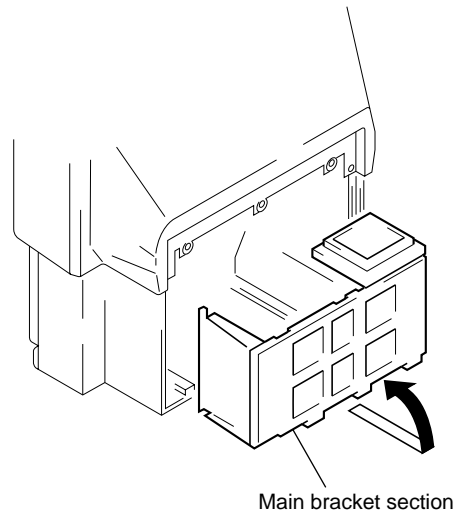


## 2-3. SERVICE POSITION

### • KP-EF41



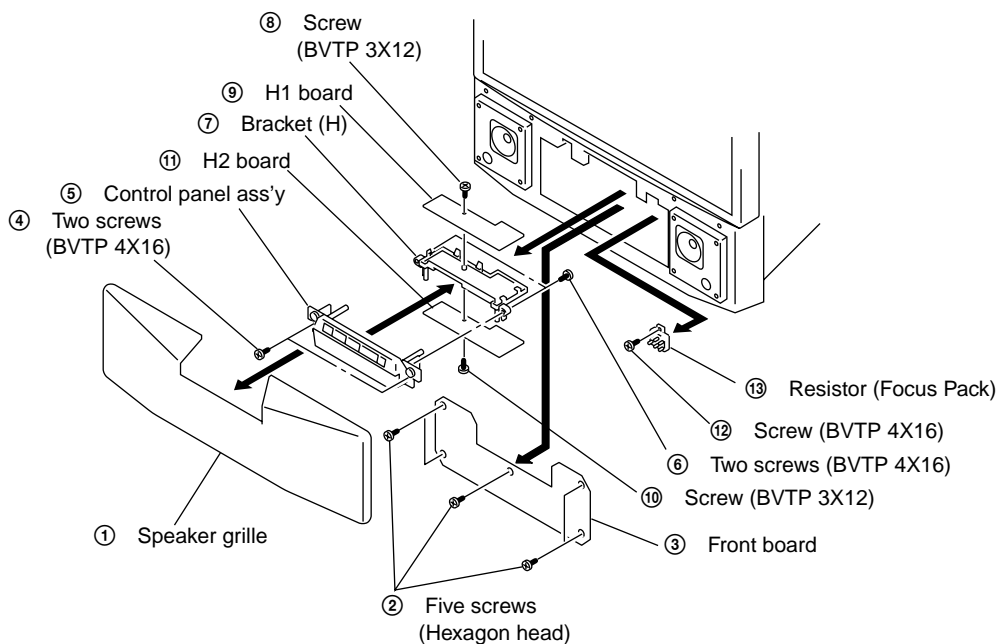
### • KP-EF48



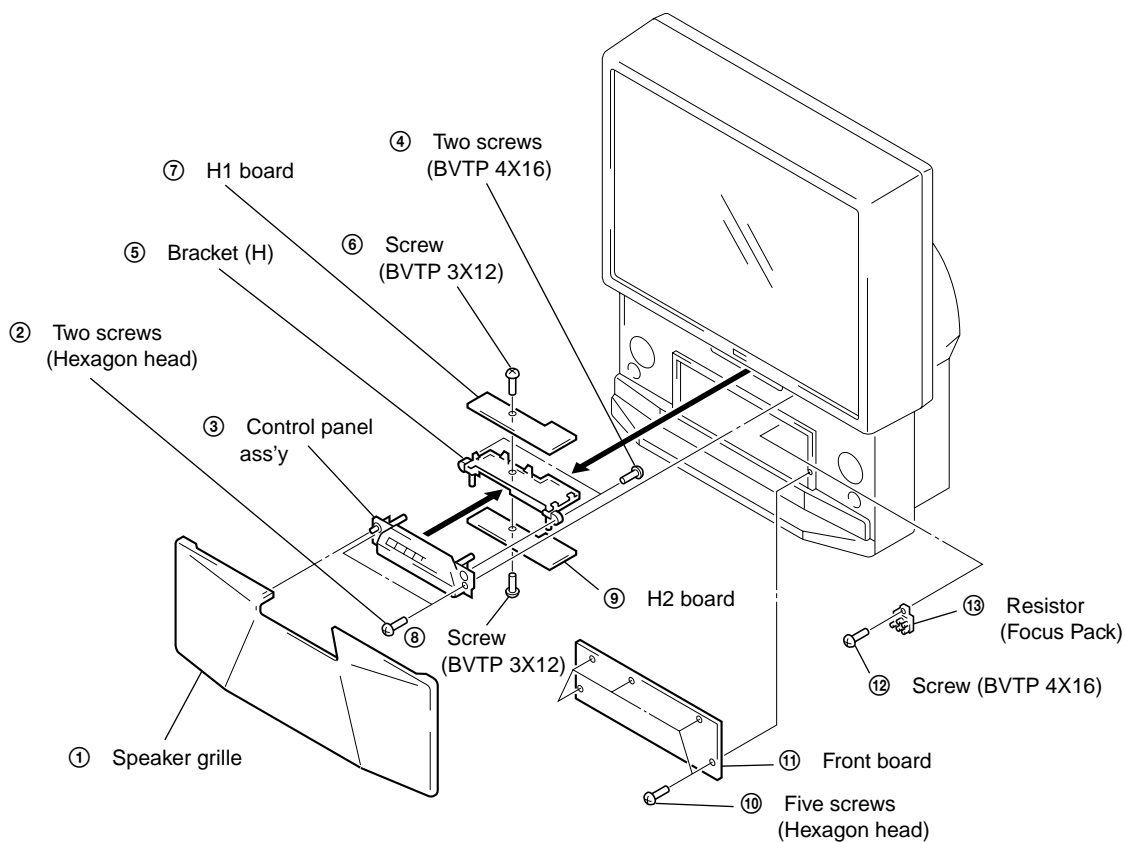


## 2-4. H1 BOARD, H2 BOARD AND RESISTOR (FCOUS PACK) REMOVAL

### • KP-EF41

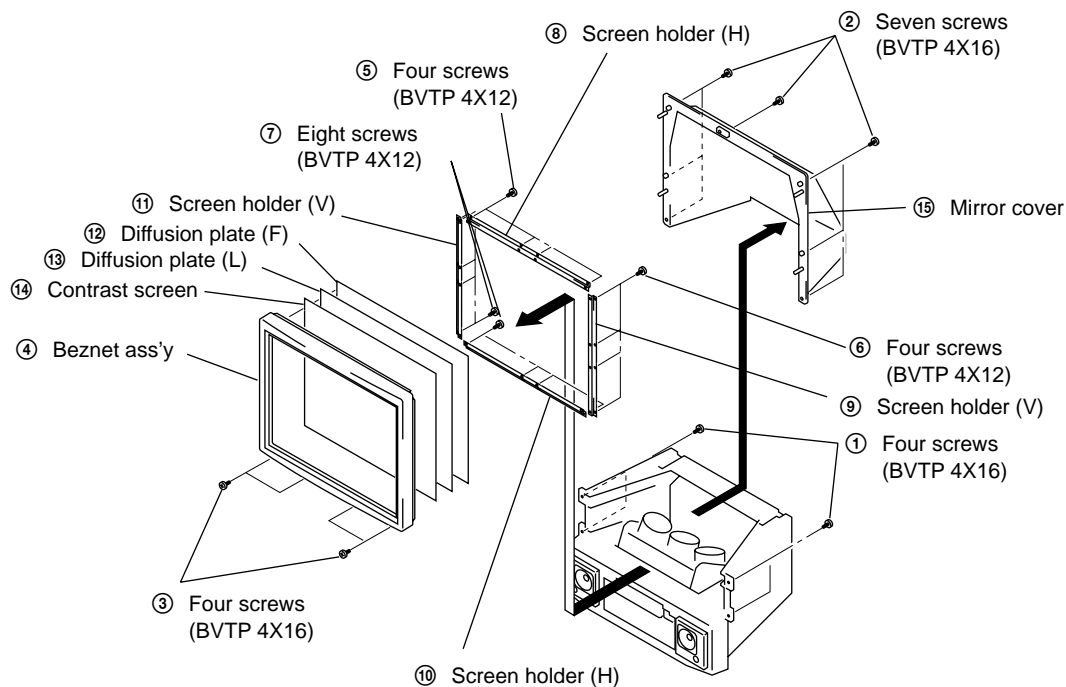


### • KP-EF48

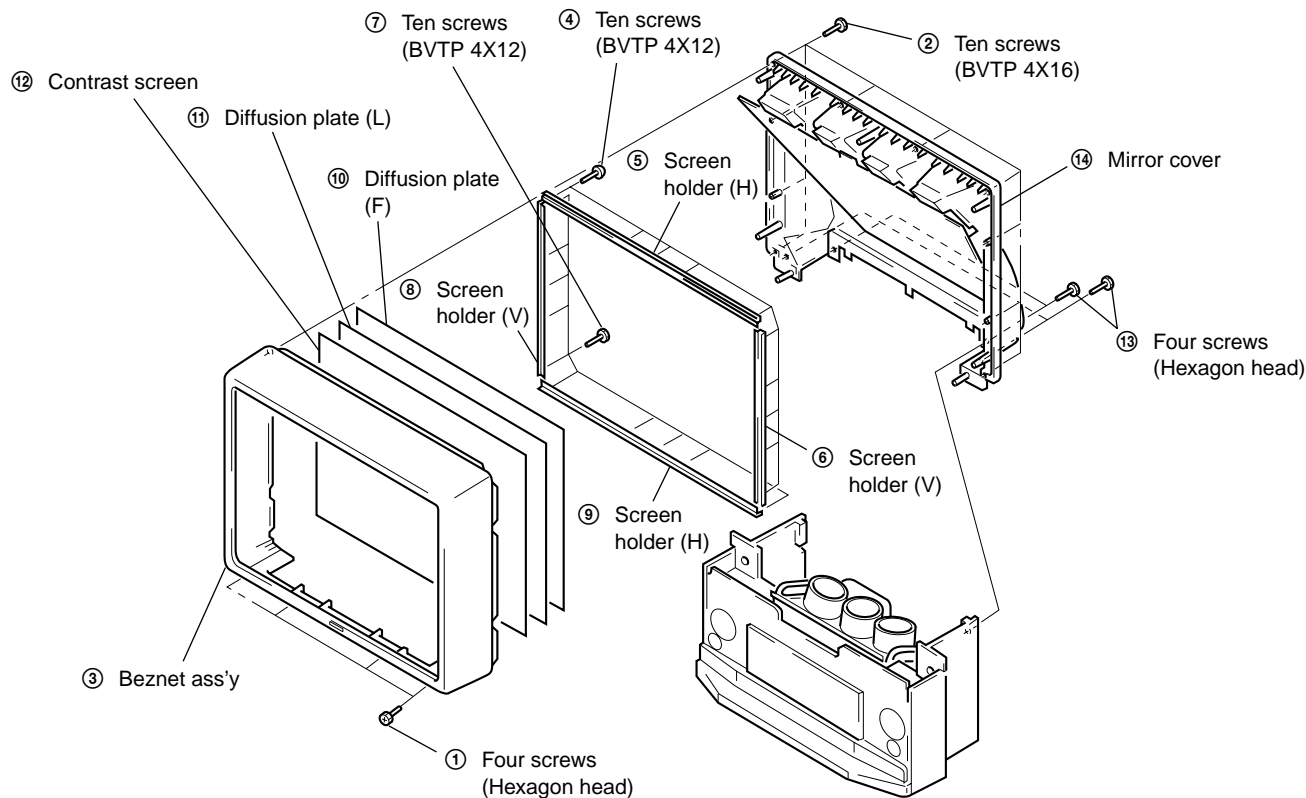


## 2-5. BEZNET SECTION REMOVAL

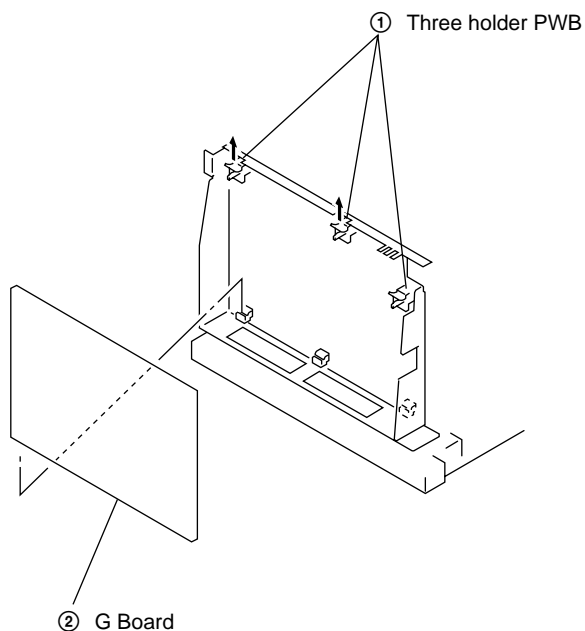
### • KP-EF41



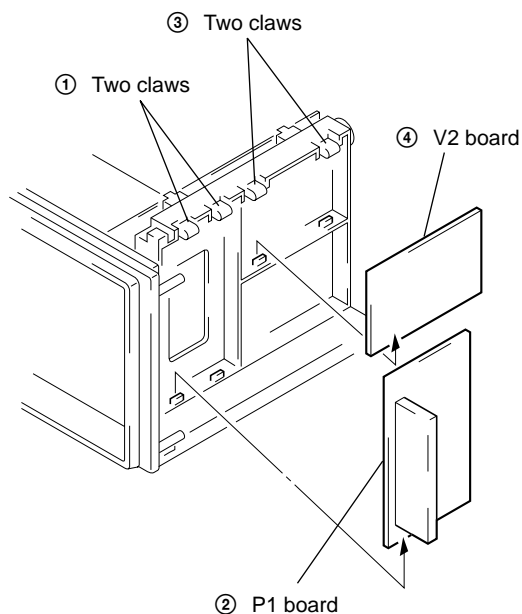
### • KP-EF48



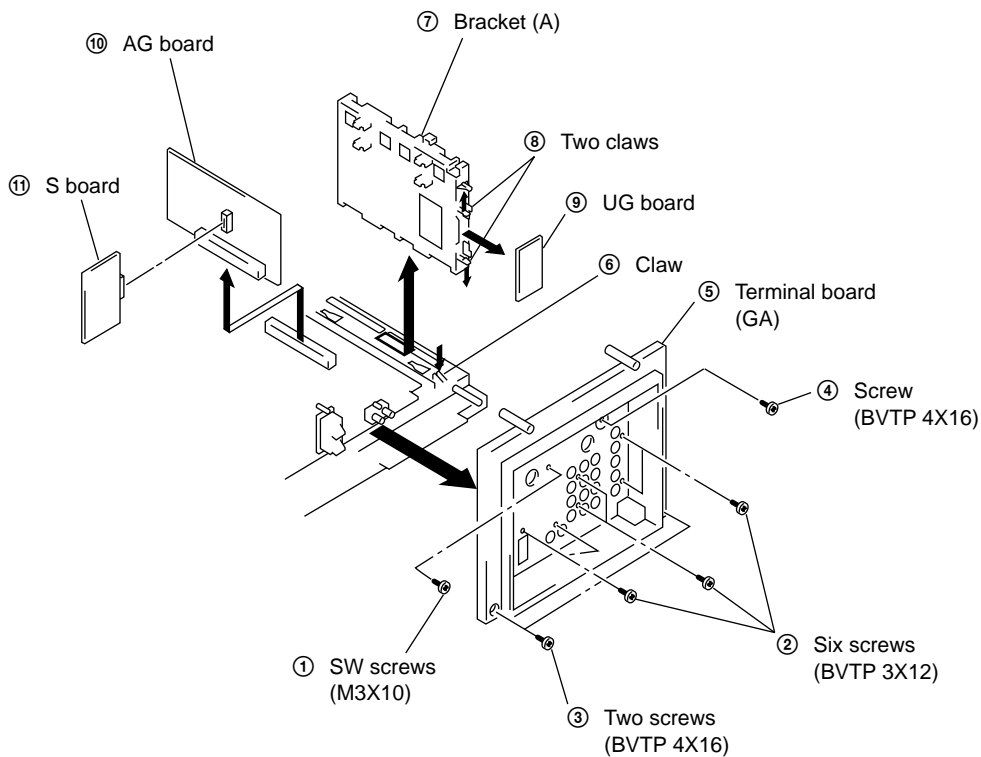
## 2-6. G BOARD REMOVAL



## 2-7. P1 BOARD AND V2 BOARD REMOVAL



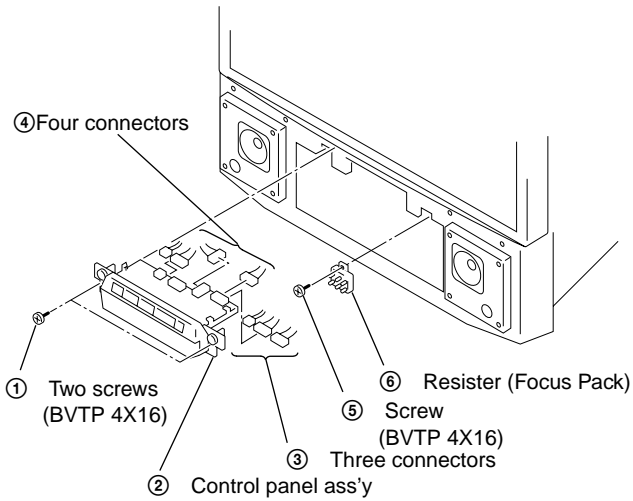
## 2-8. UG BOARD, AG BOARD AND S BOARD REMOVAL



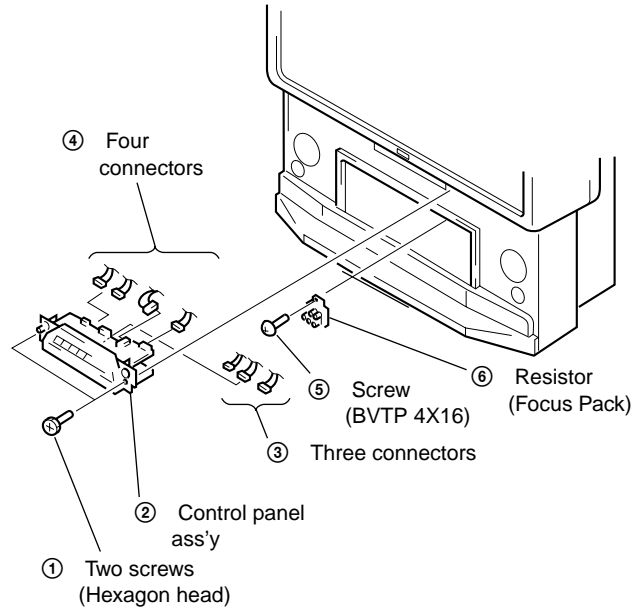
## 2-9. CHASSIS BLOCK REMOVAL

### (1) H1, H2 BOARDS AND RESISTOR REMOVAL

#### • KP-EF41



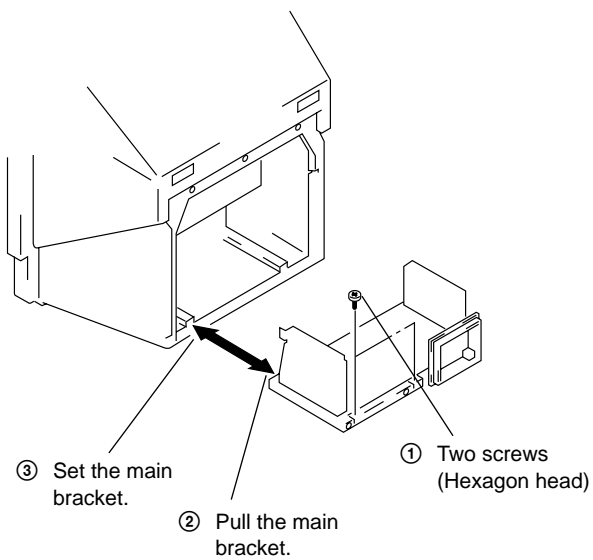
#### • KP-EF48



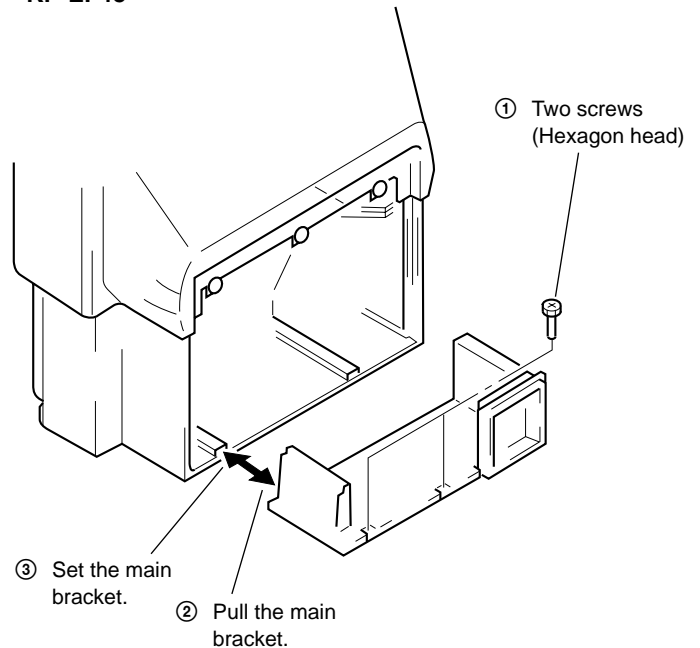
### (2) MAIN BRACKET REMOVAL

\* Pay particular attention to the wires of each PCB when pulling out the main bracket.

#### • KP-EF41



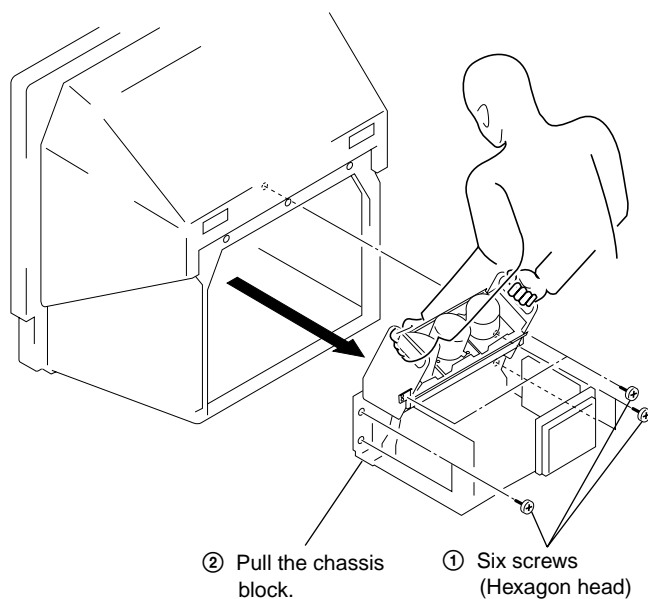
#### • KP-EF48



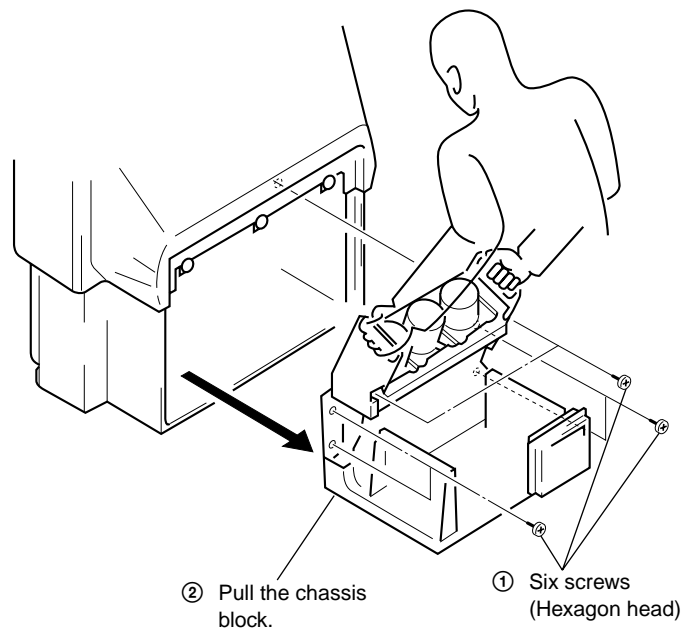
### (3) CHASSIS BLOCK REMOVAL

\* Pull out the chassis block by gripping the handles as shown in the diagram.  
At this time, pay particular attention to the components removed in (1).

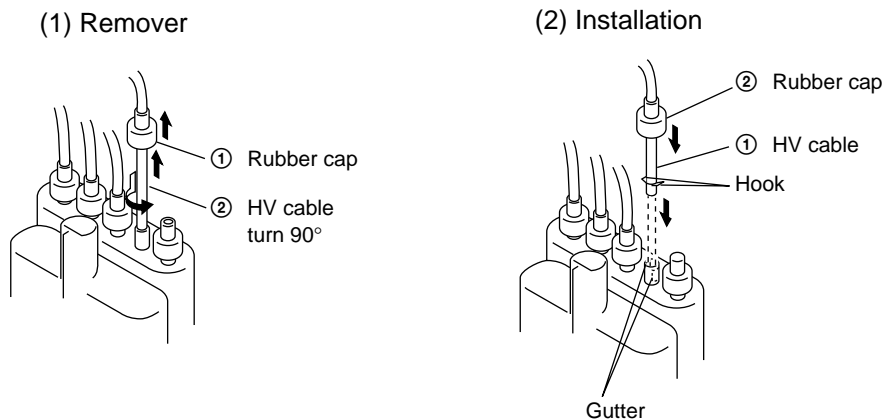
#### • KP-EF41



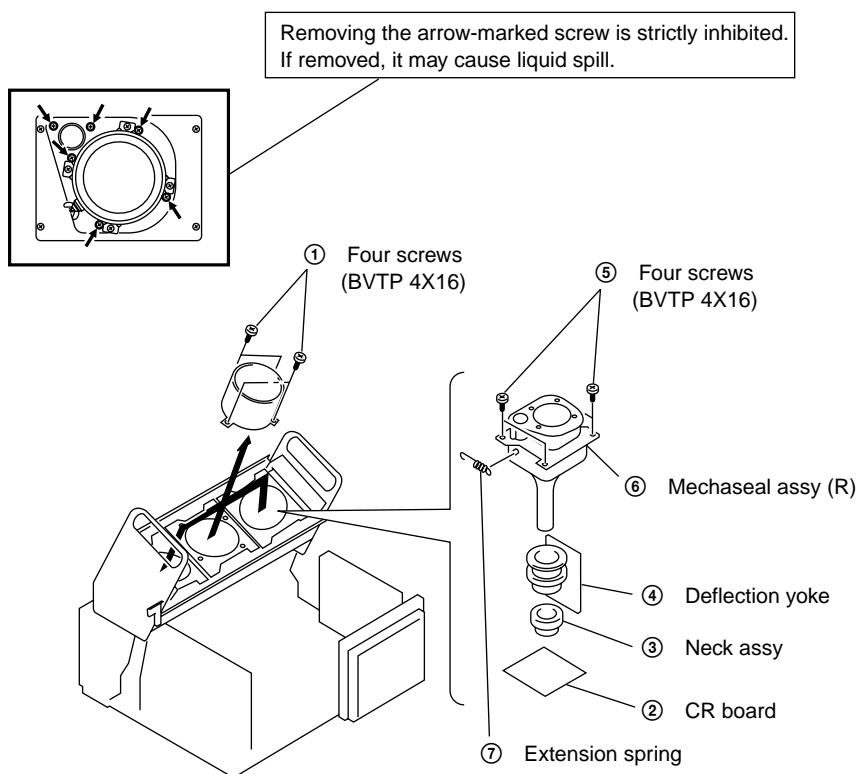
#### • KP-EF48



## 2-10. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL



## 2-11. MECHASEL ASSY REMOVAL



## SECTION 3 SET-UP ADJUSTMENTS

### 3-1. SCREEN VOLTAGE ADJUSTMENT (ROUGH ALIGNMENT)

1. Receive the Monoscope signal.
2. Set 50% BRIGHTNESS and minimum PICTURE.
3. Turn the red VR on the FOCUS Pack all the way to the left and then gradually turn it to the right until the point where you can see the retrace line.
4. Next gradually turn it to the left to the position where the retrace line disappears.

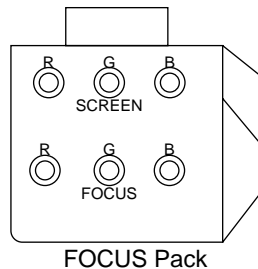


Fig. 3-1

### 3-2. FOCUS ADJUSTMENT

1. Loose the lens screw.
2. Set in service mode.
3. Place the caps on the red and blue lens so that only the green color is shown.
4. Press the Commander button and select OSD (CHSW) to display the test signal (crosshatch) on the screen.
5. Rotate the green lens and align with the optimal focus point from the test signal.
6. Rotate the green VR on the FOCUS Pack and align to obtain the optimal focus point.
7. Perform the same alignment for red and blue lenses and electric focus.
8. Fix lens screw.

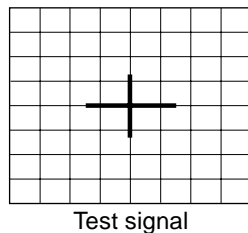


Fig. 3-2

### 3-3. SCREEN (G2) ADJUSTMENT

1. Connect JIG (A) to 200 V and GND.
2. Select VIDEO mode without signals.
3. Connect JIG to the TP701(KR), TP731(KG) or TP761(KB) of CR board, CG board and CB board.
4. Adjust R, G and B screen voltage to until retrace line disappears with screen VR on the focusblock.

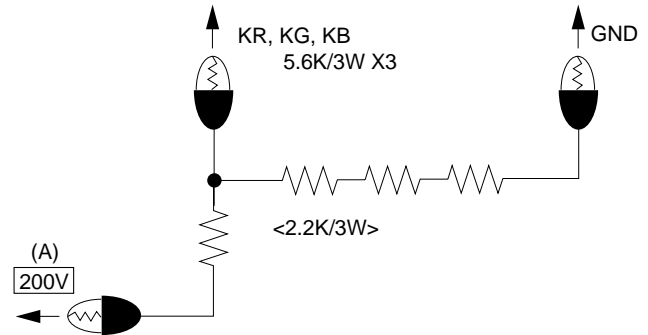


Fig. 3-3

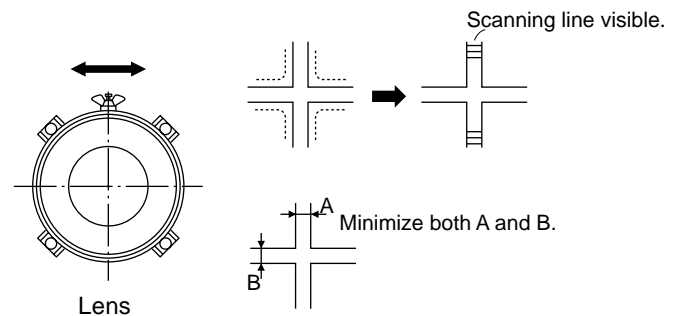


Fig. 3-4

Fig. 3-5

### 3-4. DEFLECTION YOKE TILT ADJUSTMENT

1. Set to receive the Monoscope signal.
2. Set in service mode.
3. Place the caps on the red and blue lens so that only the green color.
4. Loosen the deflection yoke setscrew and align the tilt of the Deflection Yoke so that the bars at the center of the monoscope pattern are horizontal.
5. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT.
6. The tilt of the deflection yoke for red and Blue is aligned the same as was done for green.

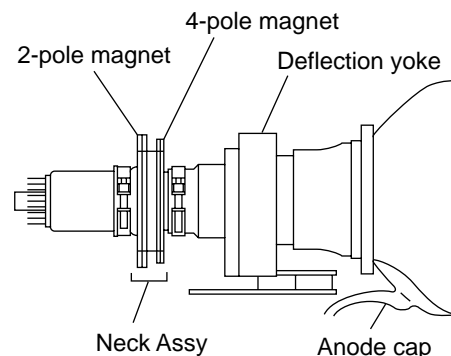


Fig. 3-6

### 3-5. 2-POLE MAGNET ADJUSTMENT

1. Set in service mode.
2. Set to receive the Dot signal.
3. Place the caps on the red and blue lens so that only the green color is shown.
4. Turn the green VR on the focus block to the right and set to overfocus to enlarge the spot.
5. Now align the 2-Pole Magnet so that the enlarged spot is in the center of the Just Focus spot.
6. Align the green focus VR and set for just (precise) focus.
7. Perform the same alignment for red and blue.

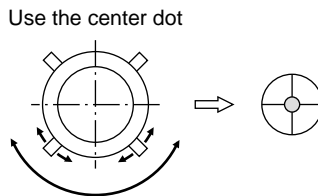


Fig. 3-7

### 3-6. 4-POLE MAGNET ADJUSTMENT

1. Set in service mode.
2. Set to receive the Dot signal.
3. Place the caps on the red and blue lens so that only the green color is shown.
4. Turn the green VR on the focus block to the left and set to underfocus to enlarge the spot.
5. Now align the 4-Pole Magnet so that the enlarged spot becomes a perfect circle.
6. Perform the same alignment for red and blue.

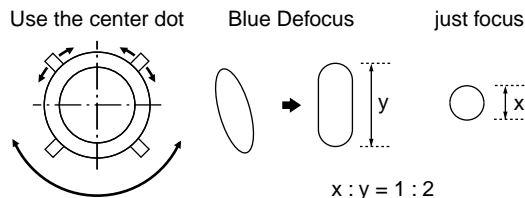


Fig. 3-8

### 3-7. DEFOCUS ADJUSTMENT (Blue)

1. Receive the Dot signal.
2. Place the caps on the red and green lens so that only the blue color is shown.
3. Rotate the blue focus volume on the focus pack and adjust to obtain best electrical focus.
4. Rotate Blue focus volume of focus pack clockwise, so that diameter of the Dot see Caution.

### 3-8. GREEN AND RED FOCUS ADJUSTMENT

#### 3-8-1. Green and Red Lens Focus Adjustment

- 1) Input a monoscope signal.
- 2) Place a lens cover over Red and Blue lenses and project only Green.
- 3) Rotate the Green lens and adjust to obtain the best lens focus.
- 4) Fix lens screw.
- 5) Repeat above process for Red.

#### 3-8-2. Green and Red Electrical Focus Adjustment

- 1) Input a monoscope signal.
- 2) Project only Green.
- 3) Rotate the green focus volume on the focus pack and adjust to obtain an optimal electrical focus in the top right corner, taking care of center focus is not NG. obtain a compromise between center and corner focus.
- 4) Repeat above process for Red.

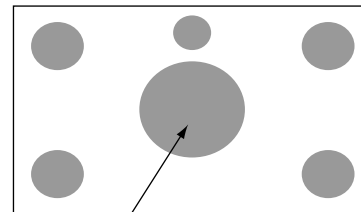


Fig. 3-11

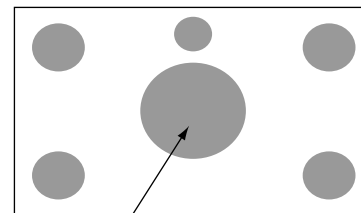




Fig. 3-12




SECTION 4

SAFETY RELATED ADJUSTMENT

When replacing the following components marked with  on the schematic diagram, always check hold-down voltage and if necessary re-adjust.

Part Replaced (  )
R1

Part Replaced (  )
E Board C515, C516, C554, D504, D507, L506, Q502, R1, R514, R516, R517, T502, T504 (FBT)
G Board IC6008

4-1. HV HOLD-DOWN ADJUSTMENT

1. Remove CN810. Connect HV meter to HV Block.

2. Connect External Power Supply to CN810 ② pin (+135V) and ① pin (GND).

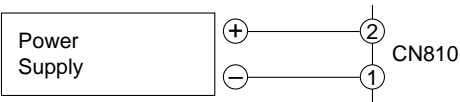


Fig. 4-1

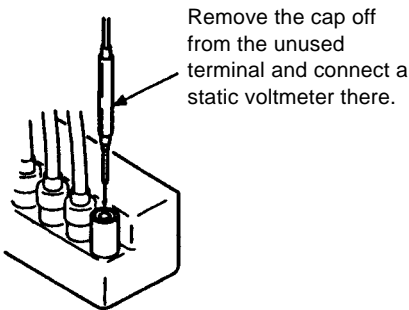


Fig. 4-2

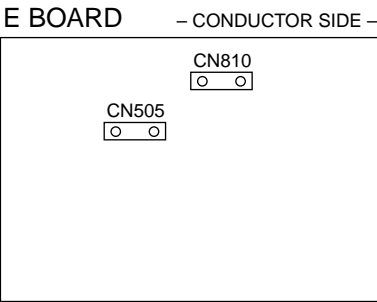


Fig. 4-3

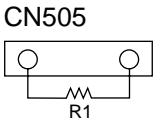


Fig. 4-4

3. Turn on the set.

4. Slowly up the supply voltage from 0V to 135V.

5. Receive dot picture and set PICTURE/BRIGHTNESS to minimum.

6. Slowly up the voltage until hold-down circuit works (picture disappear).

7. Read the HV meter of peak HV voltage.  
Spec: 34.5±0.75KV

8. If Hold-down voltage is less than 33.75KV then solder R1=820K.

9. If hold-down voltage is over than 35.25KV then take-off R514 and solder R1=9.1K.

SECTION 5  
CIRCUIT ADJUSTMENTS

5-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-871 that comes with this unit.

**Entering service mode**

With the unit on standby

i+

5

The operation sequence puts the unit into service mode.

1, 4

3, 6

MUTING

0

Select the adjustment item.

Raise/lower the data value.

Writes.

Executes the writing.

7, 0

8, 0

5, 0

i+, 0

All the data becomes the values in memory.

All user control goes to the standard state.

Service data initialization (Be sure not to use usually.)

Write 50Hz adjustment data to 60Hz, or vice versa. (not to use 2, 0.)

The screen display is :

Adjustment item

Item numberDATAMode

00VSH1FSERVICE50

XXXV21C00 00 0020

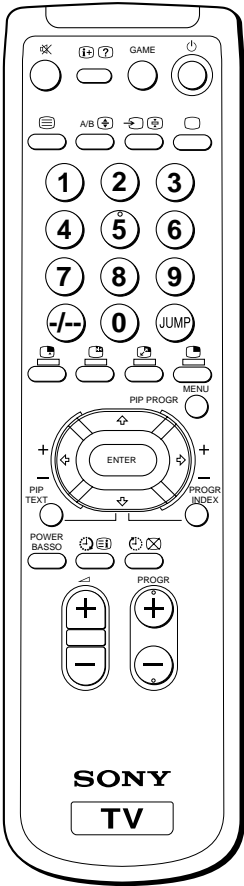
SOFTWARE VERSION

OEM CODEH SYNC COUNTER

Depends on the signals

PAL, SECAM : 50

NTSC : 60



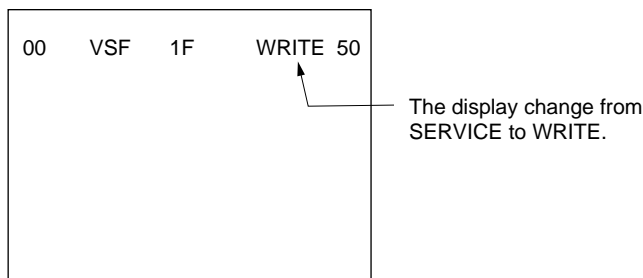
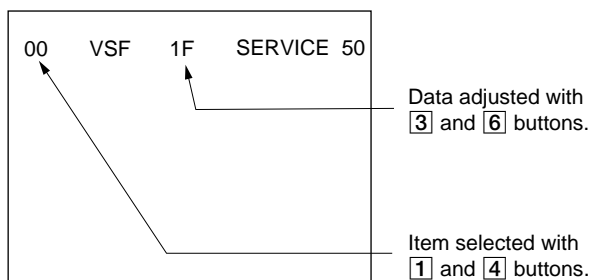
RM-871

## 5-2. ADJUSTMENT METHOD

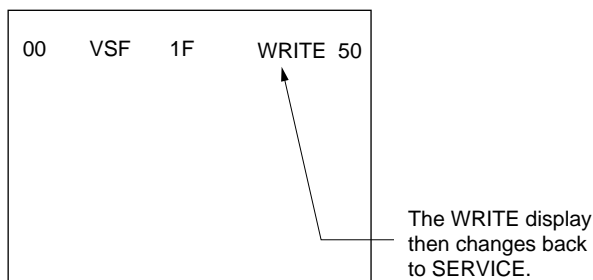
Item Number 00

This explanation uses V-Position as an example.

1. Select 00 VSH with the **[1]** and **[4]** buttons.
2. Raise/lower the data with the **[3]** and **[6]** buttons.
3. Select the optimum state. (The standard is IF for PAL reception.)
4. Write with the **[MUTING]** button. (The display changes to WRITE.)
5. Execute the writing with the **[0]** button. (The WRITE display will be changed back to SERVICE.)



Written with **[MUTING]**



Write executed with **[0]**

Use the same method for Items Number 00-99. Use **[1]** and **[4]** to select the adjustment item, use **[3]** and **[6]** to adjust, write with **[MUTING]**, then execute the write with **[0]**.

- As for V-FREQ, by searching the bolded screen V range with adjusting data.

**Note :** 1. For adjustment Items that have different standard data between 50Hz or 60Hz and normal or wide, be sure to use the respective input signal while adjusting.

2. In **[WRITE]**, the data for all items are written into memory.

## 5-3. ADJUSTMENT AFTER IC1001 and IC1702 REPLACEMENT

1. Enter to Service Mode.
2. Change IC1001 (Except for Registration Adjustment).  
Change IC1702 (Only Registration Adjustment).
3. Call each item number, and check if the respective screen shows the normal picture.  
In cases where items are not well adjusted, recitify the items with fine adjustment.

Write the data per each item number ( **[MUTING]** + **[0]** )

4. Select item numbers "98" (OP0) and "99" (OP1) and respectively set the bit per model with command buttons **[3]** and **[6]**.

Adjustment Item Table

Item Display	Adj Item	Data Range	Std Values	Register Name	Device
00	VSH	00~3F	1B	V POSITION	CXA2050S
01	VSZ	00~3F	21	V SIZE	
02	HSH	00~0F	07	H POSITION	
03	HSZ	00~3F	12	H SIZE	
04	SCR	00~0F	06	S CORRECTION	
05	VLN	00~0F	08	V LINEARITY	
06	PAP	00~3F	OE	PIN COMP	
07	PPH	00~0F	05	PIN PHASE	
08	UCP	00~0F	05	UP CORNER PIN	
09	LCP	00~0F	05	LOW CORNER PIN	
0A	BOW	00~0F	05	AFC-BOW	
0B	ANG	00~0F	09	AFC-ANGLE	
OSD0	CHSW	0,1	0	Hatch Display (0: Disp Hatch, 1: No Disp)	CXP86213-002S
OSD1	OSDH	1-32	10	OSD H POS	
OSD2	OSDV	1-32	10	OSD V POS	
OSD3	VMRK	0,1	0	V SIZE Mark	
SFT0	SFTE	0,1	1	Shift Enable	
SFT1	SFTF	0	0	Shift Fast	
GH0	GSEL	0,1	0	OSD Select for GH, GV (0: G + R, 1: Green)	
GH1	CENT	0	0	CENTER	
GH2	SKEW	-127~+127	0	SKEW	
GH3	BOW	-127~+127	0	BOW	
GH4	4bow	-127~+127	0	4th BOW	
GH5	SIZE	-127~+127	0	SIZE	
GH6	LIN	-127~+127	0	LINEARITY	
GH7	MSIZ	-127~+127	0	MID SIZE	
GH8	MLIN	-127~+127	0	MID LINEARITY	
GH9	KEY	-127~+127	0	KEystone	
GH10	SSKW	-127~+127	0	SUB SKEW	
GH11	MPIN	-127~+127	15	MID PINCUSION	
GH12	PIN	-127~+127	-12	PINCUSION	
GH13	SBOW	-127~+127	8	SUB BOW	
GH14	MBOW	-127~+127	0	MID BOW	
GH15	4PIN	-127~+127	0	4th PINCUSION	
GH16	4SBO	-127~+127	0	rth SUB BOW	
GV0	CENT	0	0	CENTER	
GV1	SKEW	-127~+127	0	SKEW	
GV2	BOW	-127~+127	0	BOW	
GV3	SIZE	-127~+127	0	SIZE	
GV4	LIN	-127~+127	0	LINEARITY	
GV5	MSIZ	-127~+127	0	MID SIZE	
GV6	MKEY	-127~+127	0	MID KEYSTONE	
GV7	KEY	-127~+127	0	KEYSTONE	
GV8	SSKW	-127~+127	0	SUB SKEW	
GV9	MPIN	-127~+127	0	MID PINCUSION	
GV10	PIN	-127~+127	20	PINCUSION	
GV11	SBOW	-127~+127	16	SUB BOW	
GV12	WAVE	-127~+127	0	WAVWE	
GV13	4PIN	-127~+127	25	4th PINCUSION	
RH0	CENT	-95~+96	0	CENTER	
RH1	SKEW	-95~+96	0	SKEW	
RH2	BOW	-127~+127	0	BOW	
RH3	4BOW	-127~+127	0	4th BOW	
RH4	SIZE	-127~+127	25	SIZE	
RH5	LIN	-127~+127	10	LINEARITY	
RH6	MSIZ	-127~+127	30	MID SIZE	
RH7	MLIN	-127~+127	-30	MID LINEARITY	

Item Display	Adj Item	Data Range	Std Values	Register Name	Device
RH8	KEY	-127~+127	0	KEYSTONE	
RH9	SSKW	-127~+127	0	SUB SKEW	
RH10	MPIN	-127~+127	0	MID PINCUSION	
RH11	PIN	-127~+127	-10	PINCUSION	
RH12	SBOW	-127~+127	40	SUB BOW	
RH13	MBOW	-127~+127	12	MID BOW	
RH14	4PIN	-127~+127	0	4th PINCUSION	
RH15	4SBO	-127~+127	0	4th SUB BOW	
RV0	CENT	-95~+96	-10	CENTER	
RV1	SKEW	-95~+96	0	SKEW	
RV2	BOW	-127~+127	4	BOW	
RV3	SIZE	-127~+127	0	SIZE	
RV4	LIN	-127~+127	0	LINEARITY	
RV5	MSIZ	-127~+127	0	MID SIZE	
RV6	MKEY	-127~+127	10	MID KEYSTONE	
RV7	KEY KEYSTONE	-10	-10	-127±127	
RV8	SSKW	-127~+127	10	SUB SKEW	
RV9	MPIN	-127~+127	0	MID PINCUSION	
RV10	PIN PINCUSION	10	10	-127±127	
RV11	SBOW	-127~+127	16	SUB BOW	
RV12	WAE	-127~+127	30	WAVE	
RV13	4PIN	-127~+127	10	4th PINCUSION	
RV14	MWAVE	-31~+31	0	MID WAVE	
BH0	BSEL	0,1	0	OSD Select for BH, BV (0: B + G, 1: B + R)	
BH1	CENT	-95~+96	0	CENTER	
BH2	SKEW	-95~+96	0	SKEW	
BH3	BOW	-127~+127	0	BOW	
BH4	4BOW	-127~+127	0	4th BOW	
BH5	SIZE	-127~+127	-25	SIZE	
BH6	LIN	-127~+127	-10	LINEARITY	
BH7	MSIZ	-127~+127	30	MID SIZE	
BH8	MLIN	-127~+127	30	MID LINEARITY	
BH9	KEY	-127~+127	0	KEY KEYSTONE	
BH10	SSKW	-127~+127	0	SUB SKEW	
BH11	MPIN	-127~+127	0	MID PINCUSION	
BH12	PIN	-127~+127	-10	PINCUSION	
BH13	SBOW	-127~+127	-40	SUB BOW	
BH14	MBOW	-127~+127	-16	MID BOW	
BH15	4PIN	-127~+127	0	4PIN 4th PINCUSION	
BH16	4SBO	-127~+127	0	4th SUB BOW	
BV0	CENT	-95~+96	-10	CENTER	
BV1	SKEW	-95~+96	0	SKEW	
BV2	BOW	-127~+127	0	BOW	
BV3	SIZE	-127~+127	0	SIZE	
BV4	LIN	-127~+127	0	LINEARITY	
BV5	MSIZ	-127~+127	0	MID SIZE	
BV6	MKEY	-127~+127	-10	MID KEYSTONE	
BV7	KEY	-127~+127	10	KEYSTONE	
BV8	SSKW	-127~+127	-10	SUB SKEW	
BV9	MPIN	-127~+127	0	MID PINCUSION	
BV10	PIN	-127~+127	10	PINCUSION	
BV11	SBOW	-127~+127	32	SUB BOW	
BV12	WAVE	-127~+127	-30	WAVE	
BV13	4PIN	-127~+127	10	4th PINCUSION	
BV14	MWAVE	-31~+31	0	MID WAVE	
ACV0	ART0	1-8	6	DATA SAMPLE LENGTH	
ACV1	ATIM	0-255	1S	SAMPLE START TIME (UP)	

Item Display	Adj Item	Data Range	Std Values	Register Name	Device
ACV2	ATIM	0-255	132	SAMPLE START TIME (LSR)	
ACV3	ATIB	0-255	240	SAMPLE START TIME (BOT)	
ACV4	AH51	0-255	1S	OSD H POS 50 (L & R)	
ACV5	AH52	0-255	130	OSD H POS 50 (UP & BOTTOM)	
ACV6	AV5T	0-255	1	OSD V POS 50 (UP)	
ACV7	AV5M	0-255	60	OSD V POS 50 (L & R)	
ACV8	AV5B	0-255	130	OSD V POS 60 (BOTTOM)	
ACV9	AH61	0-255	18	OSD H POS 60 (L & R)	
ACV10	AH62	0-255	130	OSD H POS 60 (BOTTOM)	
ACV11	AV6T	0-255	1	OSD V POS 50 (UP)	
ACV12	AV6M	0-255	46	OSD V POS 50 (L & R)	
ACV13	AV6B	0-255	100	OSD V POS 50 (BOTTOM)	
ACV14	RHCO	-127~+127	0	RH CENT ADJ OFFSET	
ACV15	BHCO	-127~+127	0	BH CENT ADJ OFFSET	
ACV16	RCO	-127~+127	0	RV CENT ADJ OFFSET	
ACV17	BVCO	-127~+127	0	BV CENT ADJ OFFSET	
ACV18	RHSO	-127~+127	0	RH SKEW ADJ OFFSET	
ACV19	BHSO	-127~+127	0	BH SKEW ADJ OFFSET	
ACV20	RVSO	-127~+127	0	RV SKEW ADJ OFFSET	
ACV21	BVSO	-127~+127	0	BV SKEW ADJ OFFSET	
ACV22	AERR	0-255	0	AUTO CONV. ERROR CODE	
MSC0	ACTL	0-255	0	COUNTER (LOW BYTE)	
MSC1	ACTH	0-255	0	COUNTER (HIGH BYTE)	
0C	VAP	00~3F	2F	V ASPECT	CXA2050S
0D	VSC	00~3F	1F	V SCROLL	
0E	ULN	00~0F	00	UP V LINEARITY	
0F	LLN	00~0F	00	LOW V LINEARITY	
10	EHH	00~03	00	EHT-H	
11	EHV	00~03	00	EHT-V	
12	HBS	00~01	01	H BLK WID.ON/OFF	
13	LBK	00~0F	0F	L BLK WIDTH	
14	RBK	00~0F	0F	R BLK WIDTH	
15	JSW	00~01	00	JUMP ON/OFF SW	
16	VBW	00~03	02	V BLK WID.CON.	
17	AFC	00~03	01	AFC-MODE	
18	FHH	00~01	00	FH-HI	
19	VFQ	00~03	00	V-FREQ	
1A	VOF	00~01	00	V OFF	
1B	VMD	00~01	00	CD-MODE2	
1C	CMD	00~01	00	CD-MODE	
1D	TTL	00~03	00	INTERLACE	
1E	ZSW	00~01	00	ZOOM SW	
1F	POV	00~03	02	PRE-OVER	
20	CT1	00~01	01	C-TRAP(NTSC)	
21	CT2	00~01	01	C-TRAP(PAL)	
22	CFO	00~0F	07	C-TRAP fo ADJ	
23	SFO	00~01	00	SHARPNESS fo ADJ	
24	TOT	00~01	01	TOT FILTER SW	
25	CSW	00~03	00	COLOR SW	
26	XTL	00~03	00	XTAL	
27	CV1	00~01	01	CV/YC SEL(NTSC)	
28	CV2	00~01	01	CV/YC SEL(PAL)	
29	VM	00~01	01	VM ON/OFF	
2A	YVM	00~01	00	YS1/VM SW(0:YS1)	
2B	DPC	00~01	01	D-PIC ON/OFF	

Item Display	Adj Item	Data Range	Std Values	Register Name	Device
2C	DCO	00~01	00	DYNAMIC COLOR	
2D	GMM	00~03	00	GAMMA	
2E	DTR	00~01	01	DC-TRANSIENT	
2F	DL1	00~07	03	DELAY CTRL(PAL)	
			03		
30	DL2	00~07	03	DELAY CTRL(NTSC)	
			03		
31	DL3	00~07	03	DELAY CTRL(SECAM)	
			03		
32	DL4	00~07	07	DELAY AT DVD(50Hz)	
33	DL5	00~07	07	DELAY AT DVD(60Hz)	
34	SCN	00~0F	09	SUB-CONTRAST	
35	SC1	00~0F	0B	SUB-COLOR(OTHER)	
36	SC2	00~0F	09	SUB-COLOR(NTSC)	
37	SH1	00~0F	04	SUB-HUE(TV)	
38	SH2	00~0F	0B	SUB-HUE(VIDEO)	
39	SBR	00~3F	1F	SUB-BRIGHT	
3A	SSH	00~07	04	SUB-SHARPNESS	
			00		
3B	GDR	00~3F	35	G-DRIVE	
3C	BDR	00~3F	2F	B-DRIVE	
3D	GCF	00~0F	0C	G-CUTOFF	
3E	BCF	00~0F	0A	B-CUTOFF	
3F	RPO	00~03	01	0F[0..1]	
			02		
40	PON	00~01	01	PIC-ON	
41	RON	00~01	01	R ON	
42	GON	00~01	01	G ON	
43	BON	00~01	01	B ON	
44	AKF	00~01	00	AKB ON/OFF SW	
45	ESY	00~01	00	EXT SYNC SEL	
			00		
46	AGG	00~01	00	AGING MODE ON/OFF	
47	ABL	00~01	01	ABL PIC/PICandBRT SW (1:PIC ONLY)	
48	LIM	00~01	01	RGB LIMIT ON/OFF (1:ON)	
49	PB	00~01	01	PICTURE BOOSTER	No use
4A	BOF	00~01	01	BLACK OFFSET	
4B	UVG	00~3F	1F	USER VAR.GAMMA	
4C	ADG	00~3F	1F	ADAPTIVE GAMMA	
4D	NLA	00~3F	05	NON-LINEAR AMP	
4E	WDS	00~02	00	WINDOW SELECT	
4F	LST	00~0F	07	WINDOW LINE START	
50	LSP	00~0F	07	WINDOW LINE STOP	
51	FST	00~0F	07	WINDOW FIELD START	No use
52	FSP	00~0F	07	WINDOW FIELD STOP	
53	VA	00~01	01	V APERTURE ON/OFF	
54	VAW	00~03	00	V APERTURE WHITE	
55	VAB	00~03	00	V APERTURE BLACK	
56	VAC	00~0F	01	V APERTURE CORE	
57	SHP	00~3F	25	SHARPNESS	
			20		
58	VMH	00~3F	29	VM LIMITTER(HIGH)	No use
59	VML	00~3F	1C	VM LIMITTER(LOW)	

Item Display	Adj Item	Data Range	Std Values	Register Name	Device
5A	COR	00~3F	1C	CORING	SDA9189X
5B	DOF	00~3F	15	DSC OFFSET	
5C	DGA	00~3F	1F	DSC GAIN	
5D	DLT	00~01	01	DELAY TIME	
5E	SDL	00~0F	00	SEL PIN DELAY	
5F	POH	00~FF	1B	H POSITION(MSB 8bit)	
60	POV	00~FF	2F	V POSITION	
61	HDL	00~1F	0B	HSI DELAY	
62	AMS	00~01	00	DECIMATION FILTER	
63	VDL	00~1F	0B	VSI DELAY	
64	VSP	00~1F	0D	VSP DELAY	
65	CON	00~0F	06	CONTRAST	
66	FRY	00~0F	09	FRAME Y	
67	FRV	00~0F	00	FRAME V	
68	FRU	00~0F	00	FRAME U	
69	INF	00~01	01	INNER FRAME	
6A	FWV	00~03	02	FRAME WIDTH V	
6B	FWH	00~07	07	FRAME WIDTH H	
6C	PLL	00~03	02	PLL LOOP FILTER	
6D	PDV	00~0F	00	PEDESTAL V	
6E	PDU	00~0F	00	PEDESTAL U	
6F	DAT	00~01	00	DAC STREAM CONTROL	MSP3410
70	DAN	00~01	00	DAC CONTROL	
71	FAW	00~FF	08	NICAM FAW THRESH	
72	CTM	00~FF	08	NICAM ERROR BIT(MONO)	
73	CTN	00~FF	50	NICAM ERROR BIT(NICAM)	
74	WCD	00~FF	0A	W.G.DATA CHANGE	
75	WST	00~FF	15	W.G.STEREO THRESHOLD	
76	WTM	00~FF	50	W.G.TIMER	
77	WBT	00~01	EA	W.G.BILINGUAL THRESHOLD	
78	AGC	00~01	01	AGC AUTO/CONST	
79	CDB	00~3F	28	AGC GAIN CONST	
7A	FGP	00~7F	24	FM(BG,I,DK)PRESCALE	
7B	EMP	00~7F	40	FM(M)PRESCALE	
7C	WGP	00~7F	3C	W.G.PRESCALE	
7D	NIP	00~7F	7F	NICAM PRESCALE	
7E	CRM	00~01	00	CARRIER MUTE	
7F	CML	00~03	00	CARRIER MUTE LEVEL	
80	ACO	00~01	01	AUDIO CLOCK OUT	SAA5261
81	WAC	00~0F	01	W.G.AGREEMENT COUNT	
82	DLY	00~FF	30	STEREO SEARCH DELAY	
83	DLG	00~FF	10	W.G.SEARCH DELAY	
84	TXP	00~0F	0E	TEXT PICTURE CONT	
85	MXP	00~0F	0F	TEXT MIX MODE PIC	
86	TXH	00~03	02	TEXT DISPLAY POSITION(H)	
87	BB1	00~3F	1D	BBE CONTROL HIGH	
88	BB2	00~3F	1D	BBE CONTROL MIDDLE	
89	BB3	00~3F	28	BBE CONTROL LOW	
8A	ATW	00~03	01	AUTO WIDE IDENTSPD	
8B	BKP	00~FF	00	BLK OFF PICTURE	
8C	OSH	00~3F	0D	OSD POSITION H	
8D	ODL	00~FF	10	POWER ON DELAY	
8E	BLU	00~01	01	BLUE BACK ON/OFF	
8F	ROC	00~0F	0F	N/S CENTER VOL	

Note:  Items are fixed data.



Item Display	Adj Item	Data Range	Std Values	Register Name	Device
90	ROS	00~07	07	USER SET UP	
91	DKS	00~01	01	D/K STEREO SEARCH	
92	MUT	00~01	01	NO SYNC MUTE	
93	DID	00~01	00	DISABLE DEGAUSS	
94	DWZ	00~01	00	DISABLE WIDEZOOM	
95	BCS	00~01	00	BASS CENTER SHIFT	
96	RVS	00~01	00	BASS VOLUME SHIFT	
97	WBS	00~03	00	WOOFER OFF BASS SHIFT	
98	OP0	00~FF	C1	OPTION 0	
99	OP1	00~FF	3E	OPTION 1	

**Note:**  Items are fixed data.

## ITEM INFORMATION

No.98 OP 0

ITEM	MSP RST	H.D. M	—	—	—	—	—	Text Mode
Normal	0	0	0	0	0	0	0	1

bit 0 0: Automatic mode

1: Fasttext mode

bit 6 0: High Deviation mode Disable

1: High Deviation mode Enable

bit 7 0: Off

1: On

No.99 OP 1

ITEM	WIDE	WOOFER	TILT	VM	COMB ELECT	COMB	SECAM	B/G ONLY
Normal	0	0	1	1	1	1	1	0

E: Tilt, Digital comb, SECAM decoder

V: Wide, Tilt, Digital comb, SECAM decoder

J: Tilt, Grass comb, VM, SECAM decoder

bit3 0: Grass comb

1: Digital comb

bit2 0: comb OFF

1: comb ON

## 5-4. REGISTRATION (CONVERGENCE) ADJUSTMENT METHOD

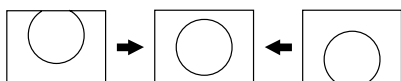
### PAL REGISTRATION ADJUSTMENT

- 1) Receive the PAL SPCB signal.
- 2) Select Service mode and enter adjustment items for Green signal.

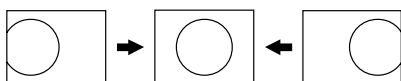
### CENTER ADJUSTMENT

- 1) Adjust GH and GV CENT.

#### GV CENT



#### GH CENT

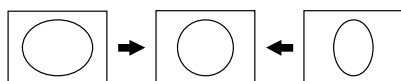


### SIZE ADJUSTMENT

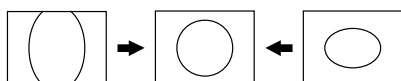
- 1) Adjust GH SIZE data "0".
- 2) Adjust VSP H-SIZE.
- 3) Make GV SIZE data "00".
- 4) Adjust VSP V-SIZE.
- 5) Adjust VSP SSCOR.

SPEC : H-SIZE 16.4 +/- 0.15 Sq.  
V-SIZE 12.3 +/- 0.15Sq.

#### VSP HSIZE



#### VSP VSIZE

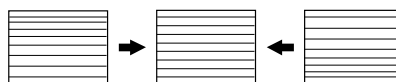


## MAIN DEFLECTION ADJUSTMENT

- 1) Adjust VSP V-Lin.

Correct linearity of the horizontal top and bottom lines.

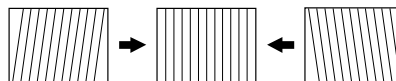
#### VSP VLINE



- 2) Adjust VSP H-SKEW

Correct the vertical center line to be in parallel with the screen edges and other colors.

#### VSP H-SKEW



- 3) Adjust VSP H-BOW.

Correct linearity of the vertical center line.

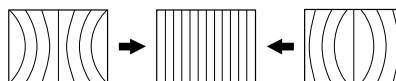
#### VSP H-BOW



- 4) Adjust VSP H-PIN.

Correct the vertical left and right lines and eliminate pin-cushion-shaped distortion.

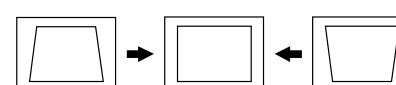
#### VSP H-PIN



- 5) Adjust VSP H-Key.

Correct the vertical left and right lines to be in parallel with each other.

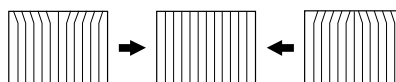
#### VSP H-KEY



- 6) Adjust VSP UC. PIN

Correct the screen top section line bow.

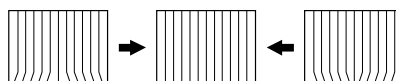
#### VSP UC. PIN



- 7) Adjust VSP LC. PIN

Correct the screen bottom section line bow.

#### VSP LC. PIN



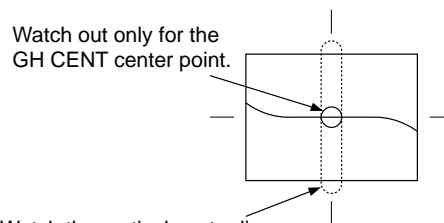
# SUB DEFLECTION ADJUSTMENT ITEM

Adjustment O : Yes – : No

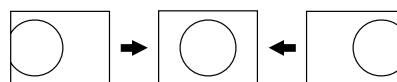
Display	Adjustment item	Adjustment type					
		GH	GV	RH	RV	BH	BV
BSEL	COL SELECT	–	–	–	–	O	–
CENT	CENT	O	O	O	O	O	O
SKEW	SKEW	O	O	O	O	O	O
BOW	BOW	O	O	O	O	O	O
4BOW	4TH BOW	O	–	O	–	O	–
SIZE	SIZE	O	O	O	O	O	O
LIN	LIN	O	O	O	O	O	O
MSIZ	MID SIZE	O	O	O	O	O	O
MLIN	MID LIN	O	O	O	–	O	–
MKEY	MID KEY	–	O	–	O	–	O
KEY	KEY	O	O	O	O	O	O
SSKW	SUB SKEW	O	O	O	O	O	O
MPIN	MID PIN	O	O	O	O	O	O
PIN	PIN	O	O	O	O	O	O
SBOW	SUB BOW	O	O	O	O	O	O
WAVE	WAVE	–	O	–	O	–	O
MBOW	MID BOW	O	–	O	–	O	–
4PIN	4TH PIN	O	O	O	O	O	O
4SBOW	4TH SUB BOW	O	–	O	–	O	–

## VERTICAL LINE ADJUSTMENT

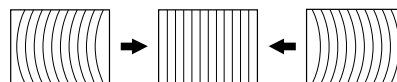
1. Carefully watching out for the GH CENT screen centre section, adjust GH CENT, GH BOW, GH SKEW.
2. GH 4th Bow adjustment. Correct the corner distortion which could not be adjusted with GH BOW.



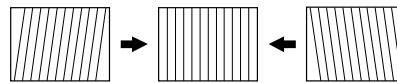
### GH CENT



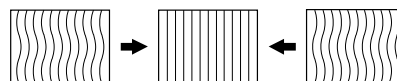
### GH BOW



### GH SKEW

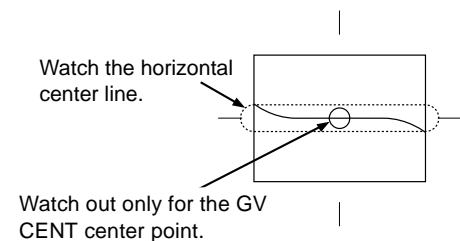


### GH 4BOW

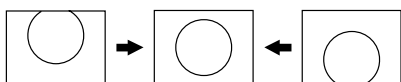


### HORIZONTAL LINE ADJUSTMENT

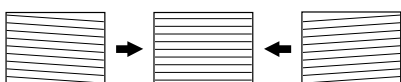
1. Finely adjust the centre position of the vertical line at the centre of the screen with GV CENT.
2. Using GV SKEW and GV BOW, correct the tilt and bow of the horizontal line at the centre of the screen.



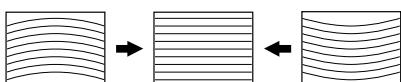
#### GV CENT



#### GV SKEW

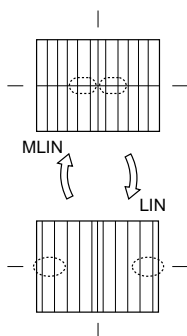


#### GV BOW



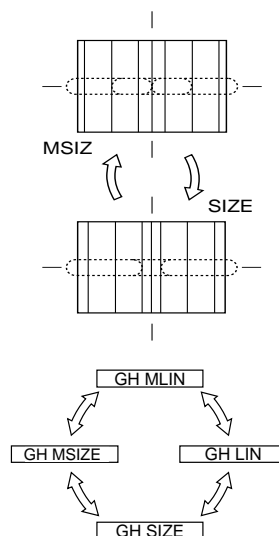
### SIZE AND LINEARITY ADJUSTMENT

1. Balance the sizes at both sides of the centre section of the screen with GH MLIN.
2. Balance the sizes on both end sections of the screen with GH LIN.
3. While tracking, adjust with GH MLIN and GH LIN so that the sizes of the horizontal line at the centre of the screen are symmetrical left and right.



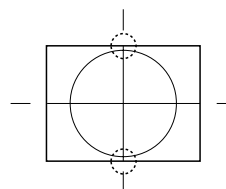
### HORIZONTAL SIZE ADJUSTMENT

1. Adjust with GH MSIZE, so that the sizes of both edges and centre are equal.
2. Adjust with GH SIZE, so that the horizontal sizes of both edges and centre are equal.
3. While tracking adjust GH MSIZE and GH SIZE so that the space intervals for the horizontal section of the screen are equal.
4. Adjust again if M LIN is changed after GH MSIZE and GH SIZE are complete.



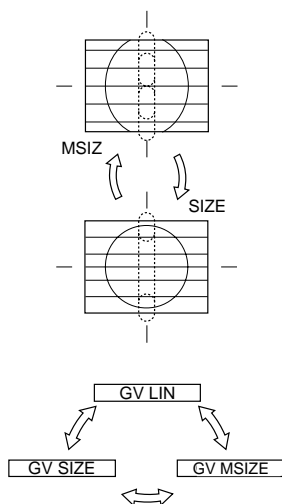
### GREEN VERTICAL LINEARITY ADJUSTMENT

1. Adjust GV LIN so that the vertical lines at the top and bottom of the screen are symmetrical.



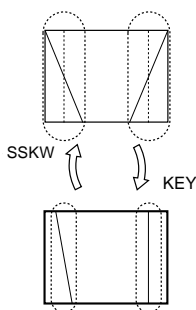
### GREEN VERTICAL SIZE ADJUSTMENT

1. Adjust GV MSIZE so that the sizes at the top and bottom and centre are equal.
2. Set the vertical size to correct specification.
3. While tracking adjust GV MSIZE and GV SIZE so that the space intervals for the vertical line of the screen are equal, also the vertical size should be within space.
4. Adjust again if GV LIN has been altered after completing the above adjustments.



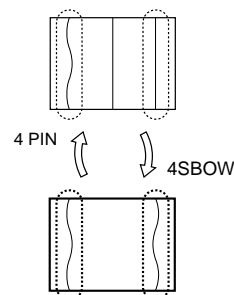
### GREEN HORIZONTAL TRAPEZOIDAL DISTORTION ADJUSTMENT

1. Adjust GH SSKW so that the tilt of the vertical lines at both edges of the screen are symmetrical left and right.
2. Adjust GH KEY so that there is no tilt in the vertical lines at both edges of the screen.
3. While tracking adjust GH KEY and GH SSKW.



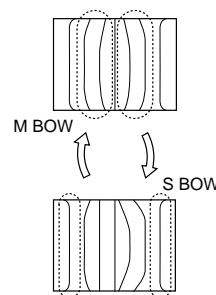
### GREEN HORIZONTAL QUATERNARY ADJUSTMENT

1. Adjust GH 4PIN, to correct the 4th order distortion.
2. Adjust GH 4SBO to balance and correct the 4th order distortion at both edges of the screen.
3. While tracking adjust GH 4PIN and GH 4SBO.



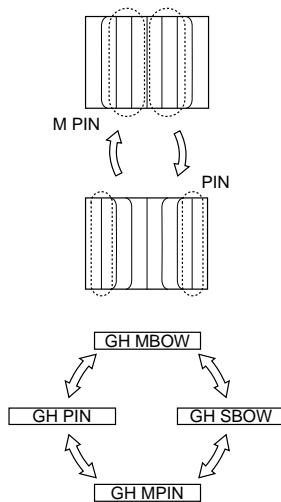
### GREEN HORIZONTAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

1. Adjust GH MBOW, so that the pin asymmetry at both sides of the centre section are symmetrical left and right.
2. Adjust GH SBOW so that the bow at both edges of the screen is symmetrical left and right.
3. While tracking adjust GH MBOW and GH SBOW so that the bow of vertical lines over the entire screen is symmetrical.



### GREEN HORIZONTAL SYMMETRICAL PIN DISTORTION ADJUSTMENT

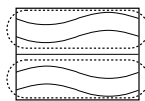
1. Adjust GH MPIN to correct pin distorton at both edges of the centre section.
2. Use GH PIN to correct pin distortion at both edges of the screen.
3. While tracking adjust GH MPIN and GH PIN so that the PIN of vertical lines on the entire screen have no bowing.
4. If there is asymmetrical distortion after adjustments, re-adjust GH MBOW and GH SBOW while tracking.



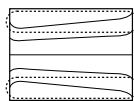
### GREEN VERTICAL WAVE (3RD-ORDER) DISTORTION ADJUSTMENT

1. Check the screen at the top & bottom, and look for any 2nd or 3rd order waveform distortion of horizontal lines. Correct with GV WAVE.
2. While tracking adjust GV WAVE and GV KEY, if here are any KEY distortion.

GV WAVE



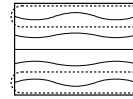
GV KEY



### GREEN VERTICAL 4TH ORDER DISTORTION ADJUSTMENT

1. By using GV 4 PIN, 4th-Order distortion of the horizontal lines at the top & bottom can be corrected. Since there is no 4SBO for vertical correction, there will be a slight imbalance, but adjust the registration to eliminate any distortion.

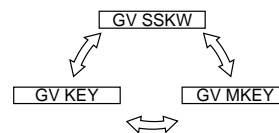
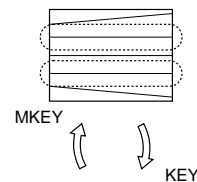
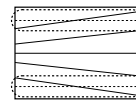
GV 4PIN



### GREEN VERTICAL TRAPEZOIDAL DISTORTION ADJUSTMENT

1. Adjust GV SSKW so that the tilt of the horizontal lines at the top and bottom of the screen are symmetrical.
2. Adjust GV MKEY so that there is no tilt for the middle section.
3. Adjust GV KEY so that there is no tilt at the top and bottom of the screen.
4. While tracking adjust GV MKEY and GV KEY, so that there is no tilt over the entire screen.
5. If the tilt is unbalanced after GV MKEY and GV KEY have been adjusted, readjust GV SSKW.

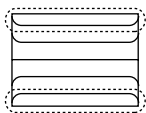
GV SSKW



### GREEN VERTICAL ASYMMETRICAL PIN DISTORTION (2ND-ORDER DISTORTION) ADJUSTMENT

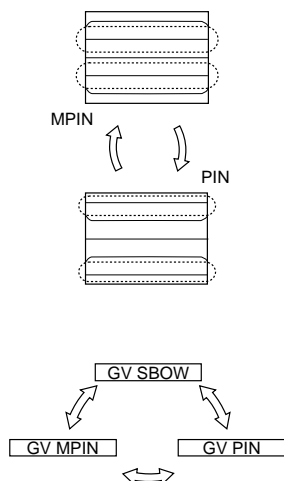
1. Correct the asymmetrical pin distortion at the top and bottom of the screen with GV SBOW.

GV SBOW



### GREEN VERTICAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

1. Using GV MPIN adjust the pin distortion at both edges of the screen and at the centre.
2. Using GV PIN, adjust, so that the horizontal lines at the top & bottom of the screen are straight lines.
3. Adjust GV MPIN & GV PIN so that there is no curve in the horizontal lines on the entire screen.
4. After adjusting the items above, using tracking with GV SBOW. GV MPIN, and GV PIN to correct the entire screen.



### GREEN AND RED REGISTRATION ADJUSTMENT

1. Receive a PAL cross-hatch signal.
2. Adjust so that the red lines lay on the green lines.  
Adjust, using the same procedure as the GREEN SUB adjustment outline above.

Note : Main registration correction should not be while adjusting Red adjustment.

BEWARE : Not to change Green Sub Items It's easily done by mistake.

### GREEN AND BLUE ADJUSTMENT

1. Adjust so that the blue and green lines are on top of each other.

Note : Main registration correction should not be while adjusting Blue adjustment.

BEWARE : Not to change Green & Red Sub Items. It's easily done by mistake.

### REGISTRATION DATA WRITE

After Finish all PAL registration adjustments, write PAL registration data by pressing from the appropriate buttons.

**DATA WRITE**

Press MUTE +0

### DATA COPY FROM PAL TO NTSC

Copy PAL data to NTSC data by pressing " DISPLAY " and " 0 "

- \* Press " **i+** (DISPLAY) " + " 0 " to copy data from PAL to NTSC.

If you press " **i+** (DISPLAY) ", then it appears " WRT5060 " to display.

- \* Make sure input signal is PAL. If input signal is NTSC and do this process, NTSC data are copied to PAL data!

### 5-5. AUTO CONVERGENCE ADJUSTMENT

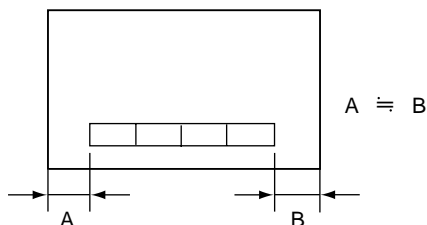
1. Enter service mode.
2. Confirm registration is well adjusted (especially center).
3. Push "Quick Focus" (Auto Convergence) button in the control panel.
4. If, Auto Convergence is successfully finished, then OK.
5. If not, please check the connection of the photo sensor and it's harness.

## 5-6. WHITE BALANCE ADJUSTMENT

1. Receive the monoscope signal and adjust the picture quality with the menu.
2. Adjust service mode S-BRIGHT so that the signal 20 IRE section barely glows.
3. Receive the all-white pattern signal.
4. Adjust the white balance with service mode G-CUTOFF and B-CUTOFF.
5. Adjust service mode S-BRIGHT so that the signal 100 IRE section barely glows.
6. Adjust the white balance with service mode G-DRIVE and B-DRIVE.
7. Repeatedly adjust the white balance for the minimum and maximum picture settings.

## 5-7. TEXT POSITION ADJUSTMENT

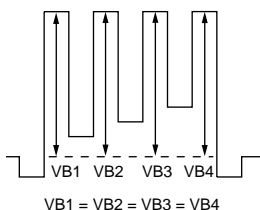
1. Receive RF signal with text.
2. Select item 86 (TXH) Text H position adjustment by commander.
3. Adjust H Position of Text.



## 5-8. PICTURE QUALITY ADJUSTMENTS

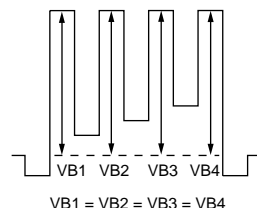
### SUB COLOR ADJUSTMENT (SC1, SC2)

1. Input a PAL color-bar.
2. Set to the following condition:  
PICTURE 100%, BRIGHTNESS 50%, COLOR 50%
3. Connect an oscilloscope to the pin ③ (B OUT) of CN405, AG board.
4. Set to Service Mode and select 35 SC1 with [1] and [4] of the commander then adjust to VB1=VB2=VB3=VB4 with [3] and [6].
5. Press [MUTING] → [0] of the commander to write the data.
6. Adjust 36 SC2 as step 2 to 5 when receiving NTSC color-bar, and then 5 step down the data of 36 SC2 data.
7. Press [MUTING] → [0] of the commander to write the data.



### SUB HUE ADJUSTMENT (SH1, SH2)

1. Input a NTSC color-bar.
2. Set the following condition:  
PICTURE 100%, BRIGHTNESS 50%, COLOR 50%.
3. Connect an oscilloscope to the pin ③ (B OUT) of CN405, AG board.
4. Select 37 SH1 with [1] and [4] of the commander by setting to Service Mode and adjust to VB1=VB2=VB3=VB4 with [3] and [6].
5. Select Video1.

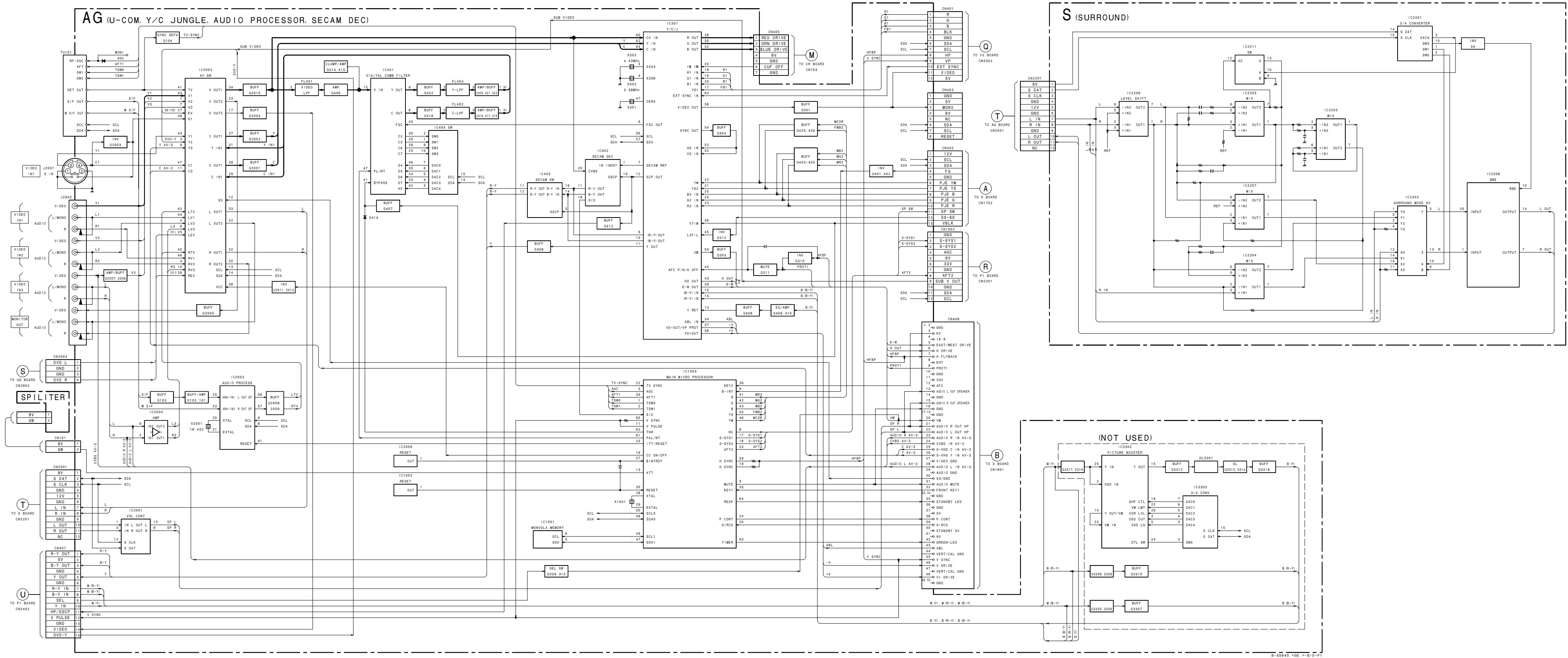


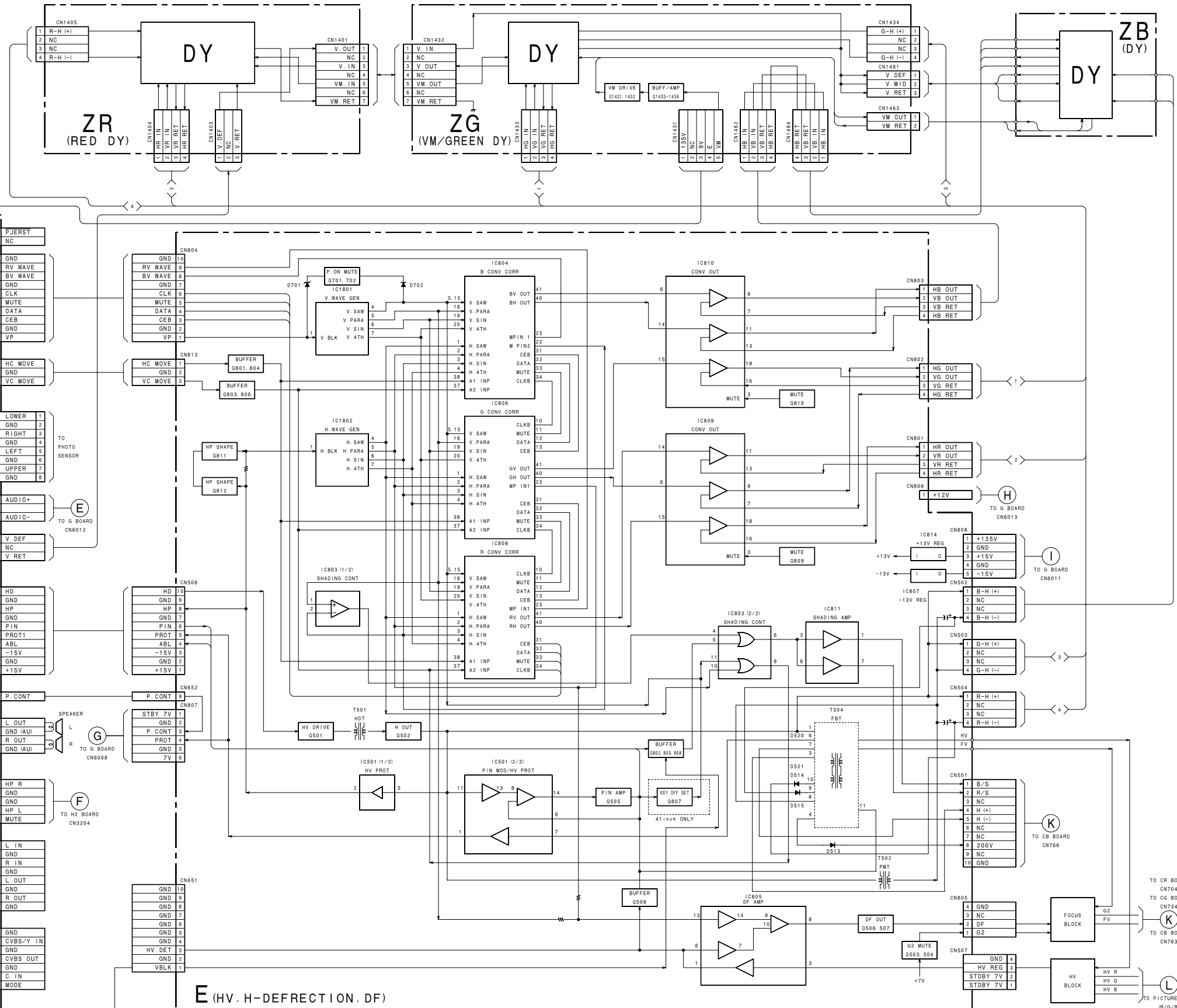
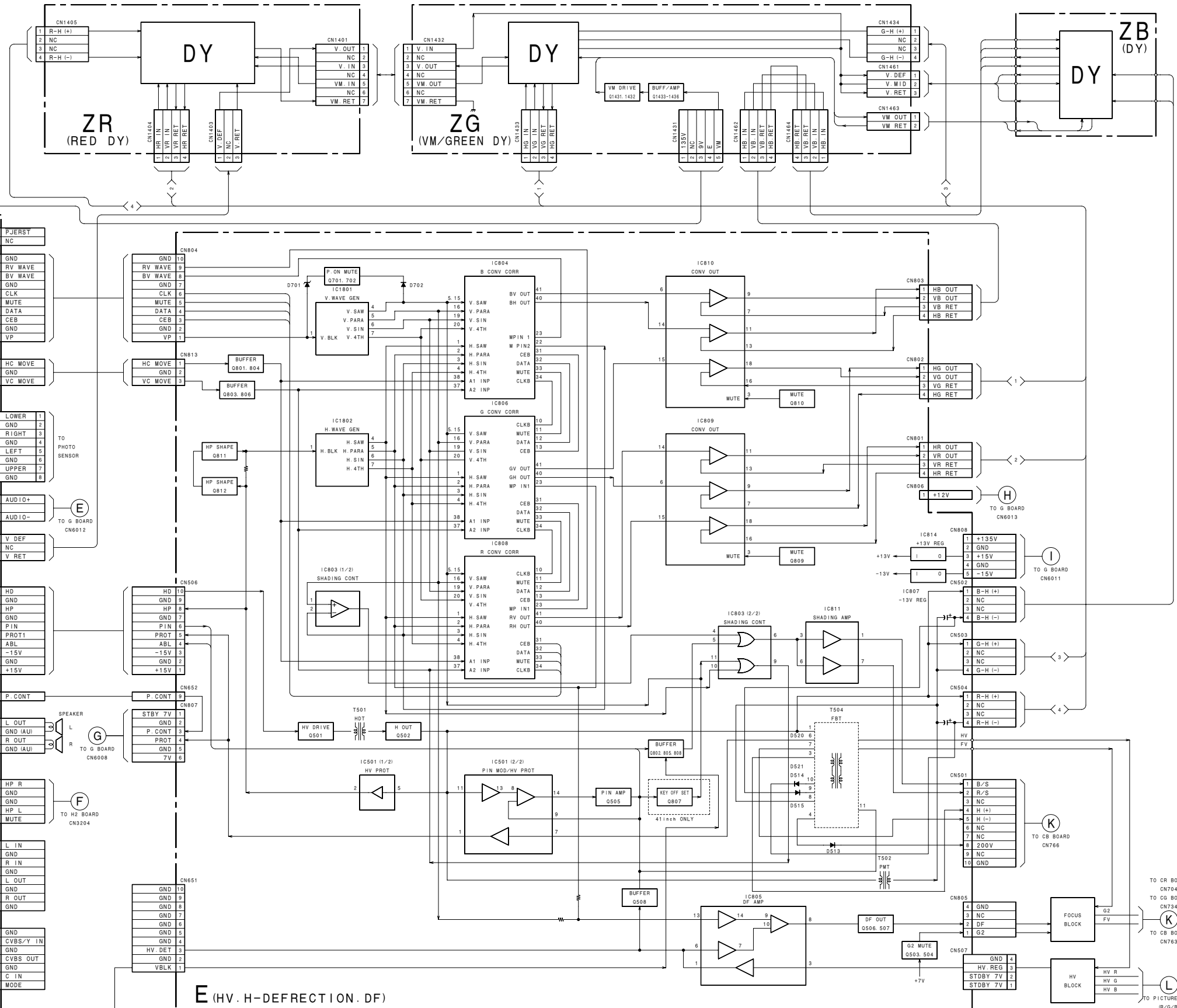
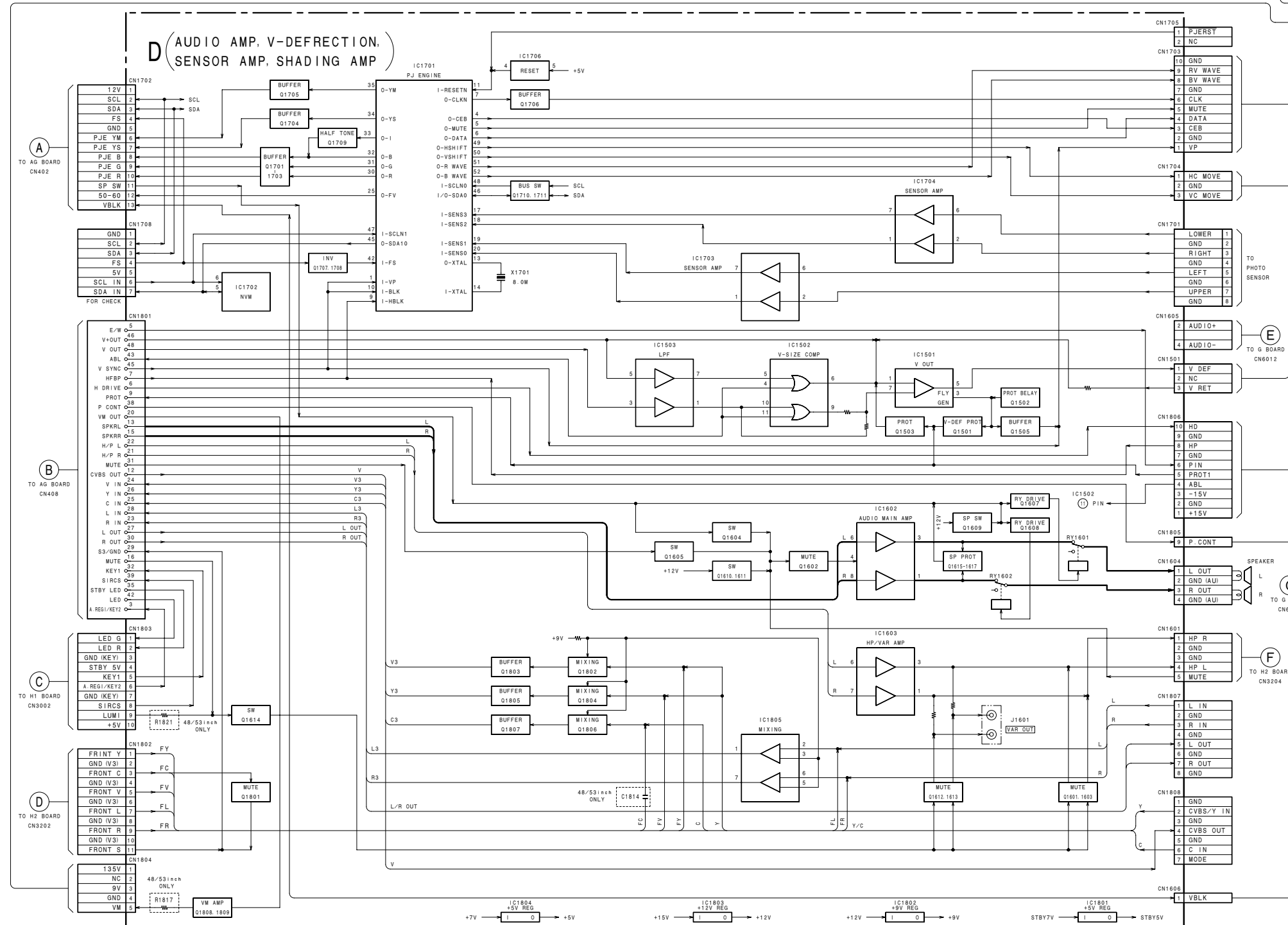
6. Input a PAL color-bar, video into video 1.
7. Adjust 38 SH2 as step 2 to 4, and then 3 step increase data of 38 SH2 data.
8. Press [MUTING] → [0] of the commander to write the data.

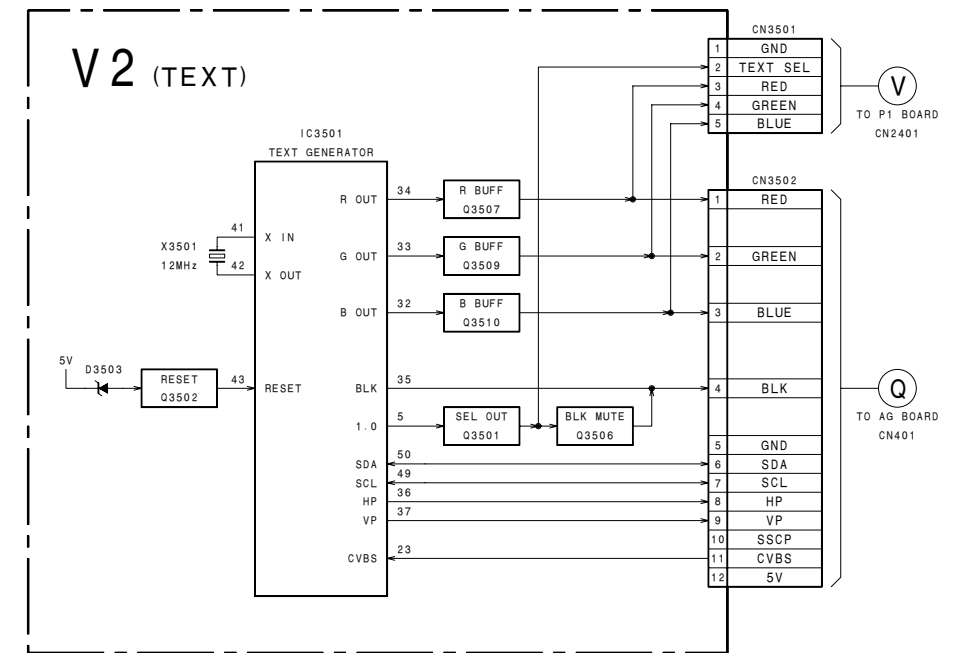


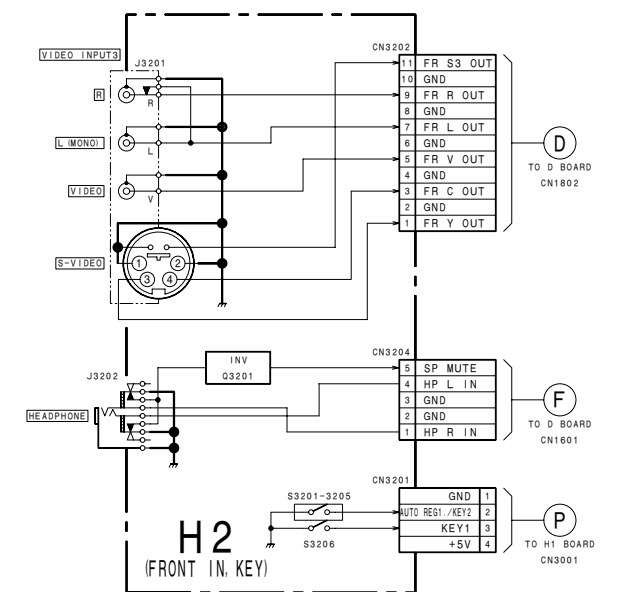
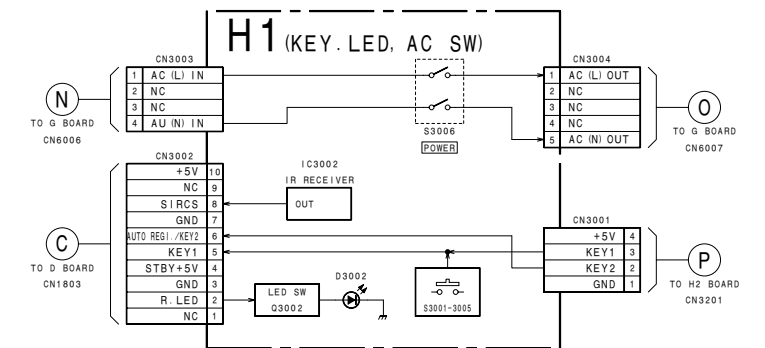
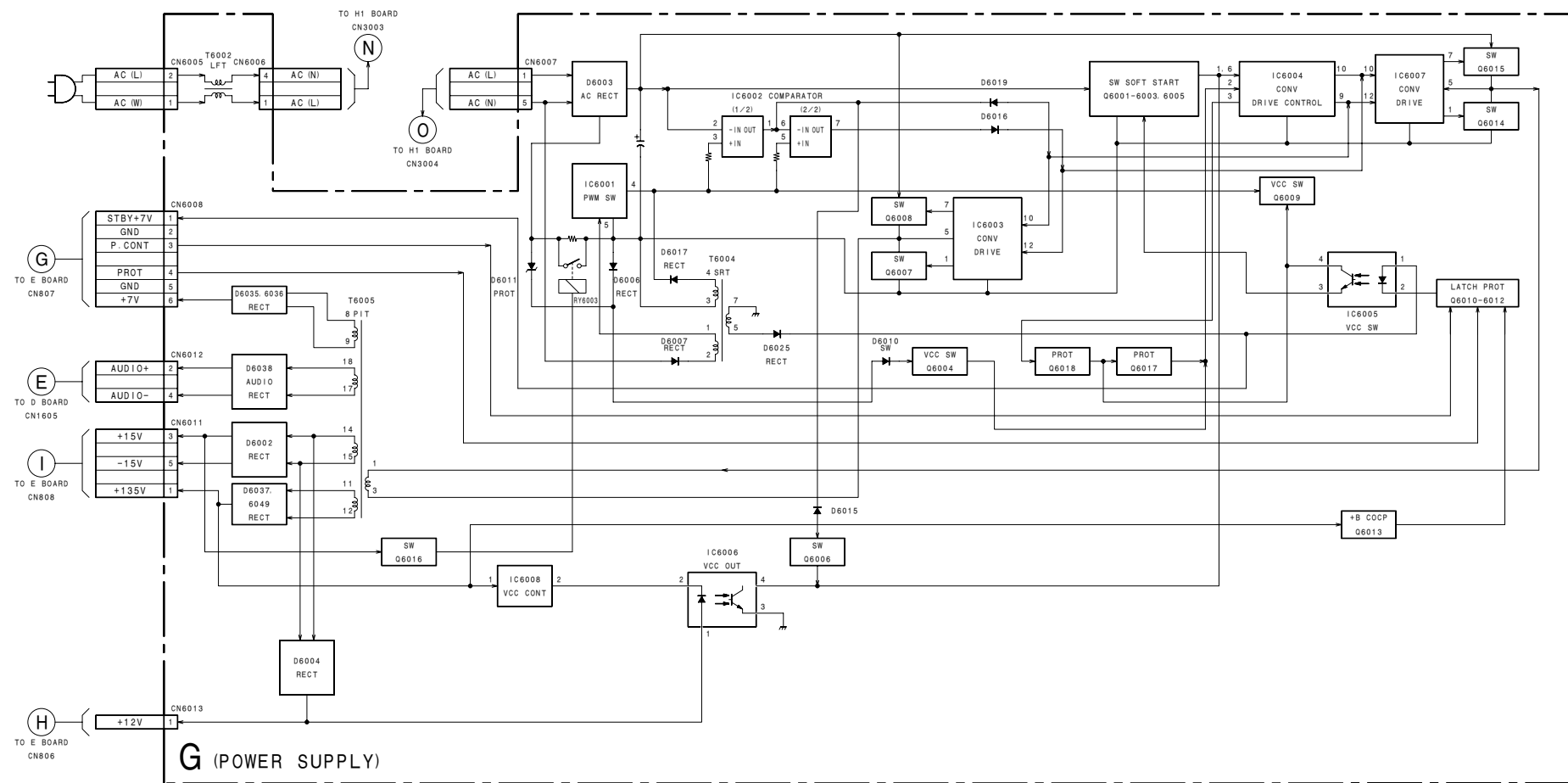
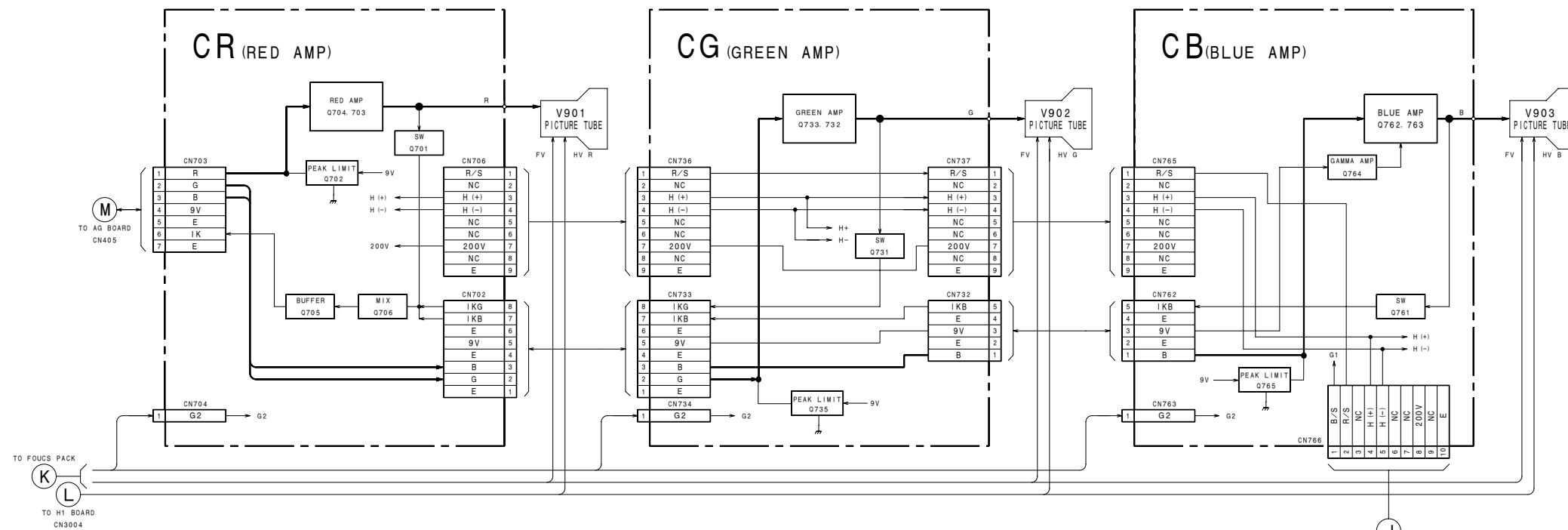
SECTION 6  
DIAGRAMS

6-1. BLOCK DIAGRAMS

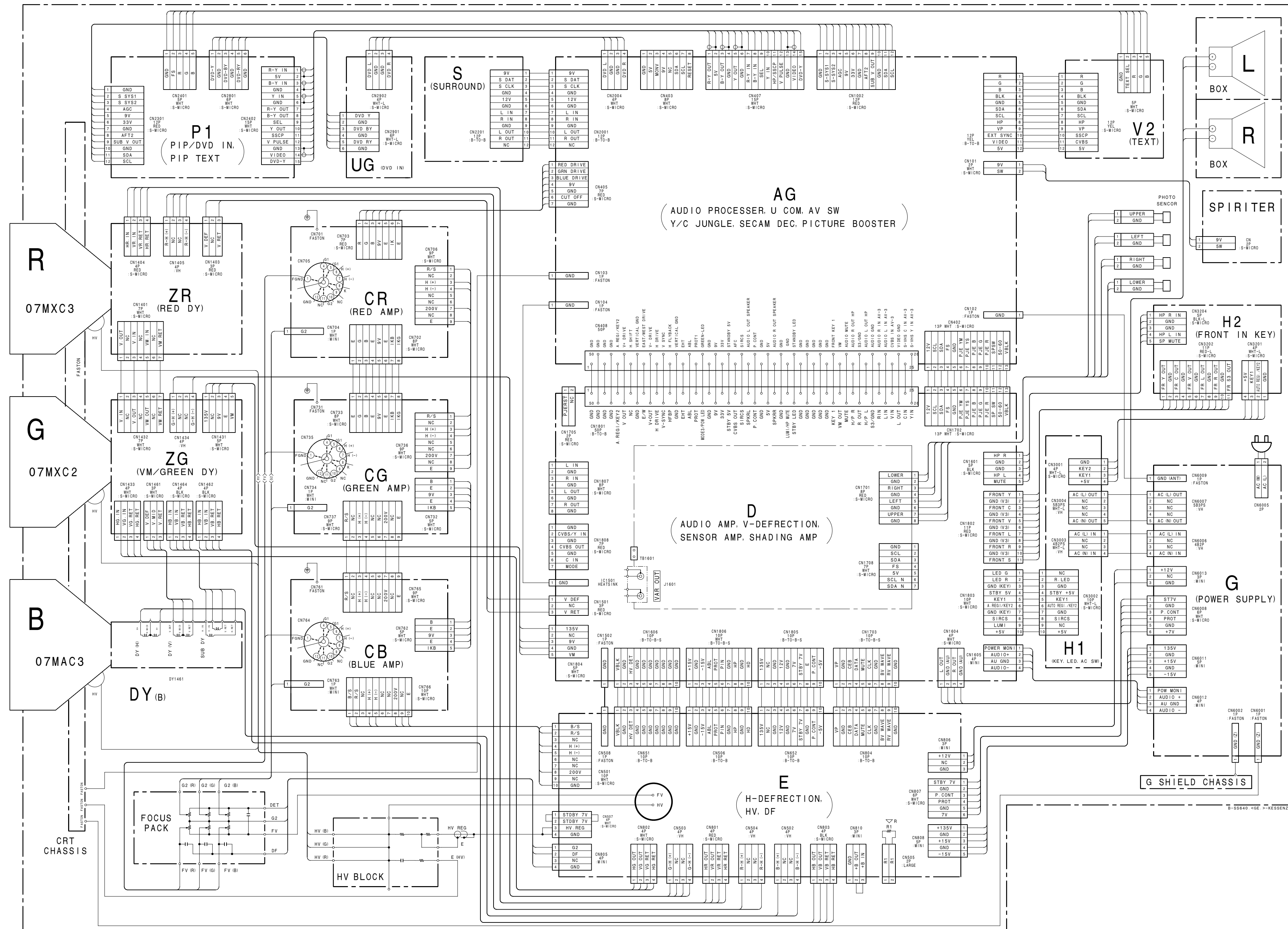




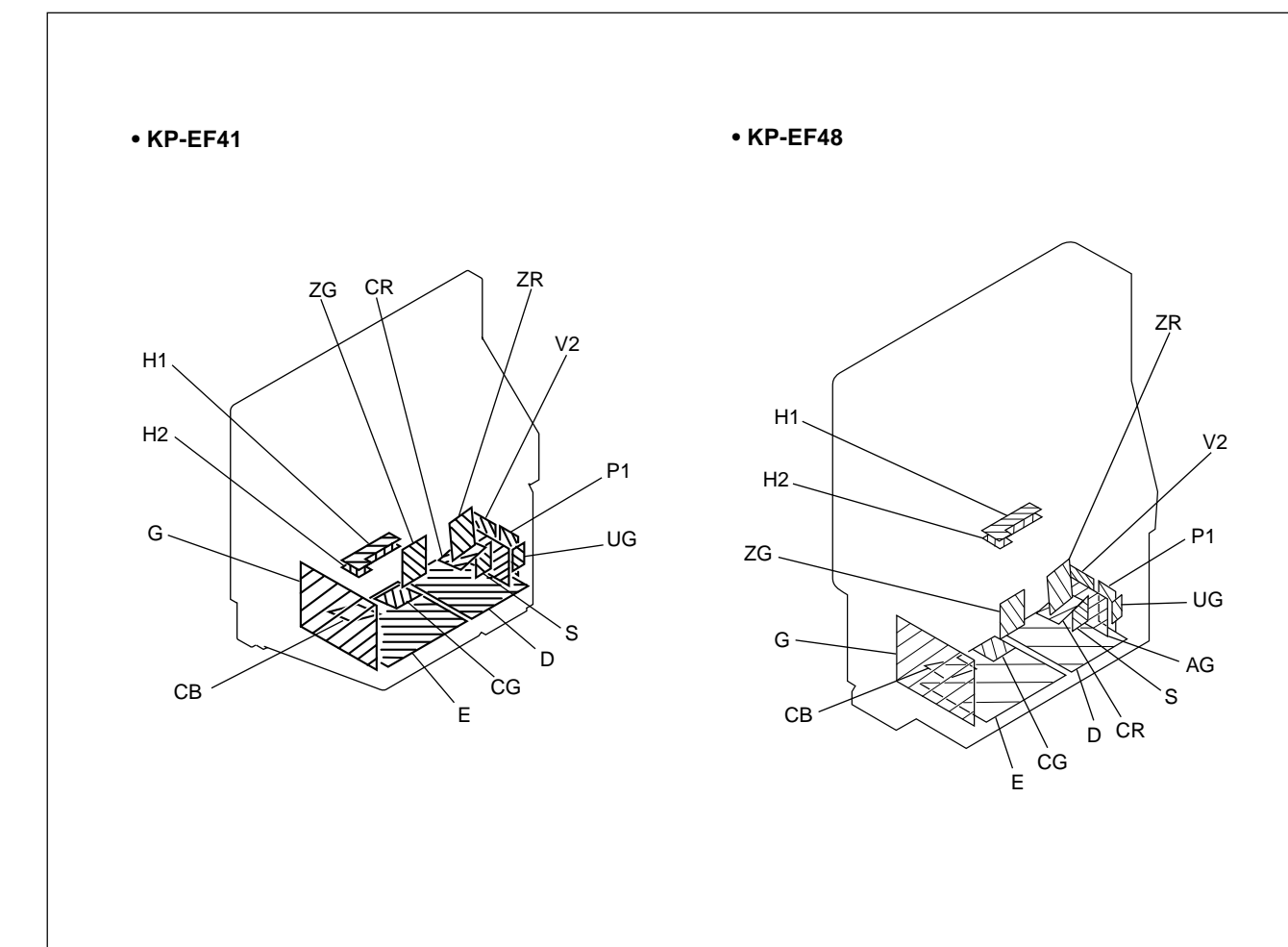




6-2. FRAME SCHEMATIC DIAGRAM



6-3. CIRCUIT BOARDS LOCATION





6-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. ( $\text{pF}$ :  $\mu\text{F}$ )
- Capacitors without voltage indication are all 50 V.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm  
Rating electrical power 1/4 W (CHIP: 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- $\Delta$  : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- $\perp$  : earth-ground.
- $\text{---}\perp\text{---}$  : earth-chassis.
- All voltages are in V.
- Readings are taken with a 10 M $\Omega$  digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- \* : Can not be measured.
- NO MARK: Common
- < : SECAM
- ( ) : NTSC 3.58 MHz
- Circled numbers are waveform references.
- ---+ : B + bus.
- ---+ : B - bus.
- + : Signal path.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH-TEMPERATURE
	: ALR	HIGH RIPPLE

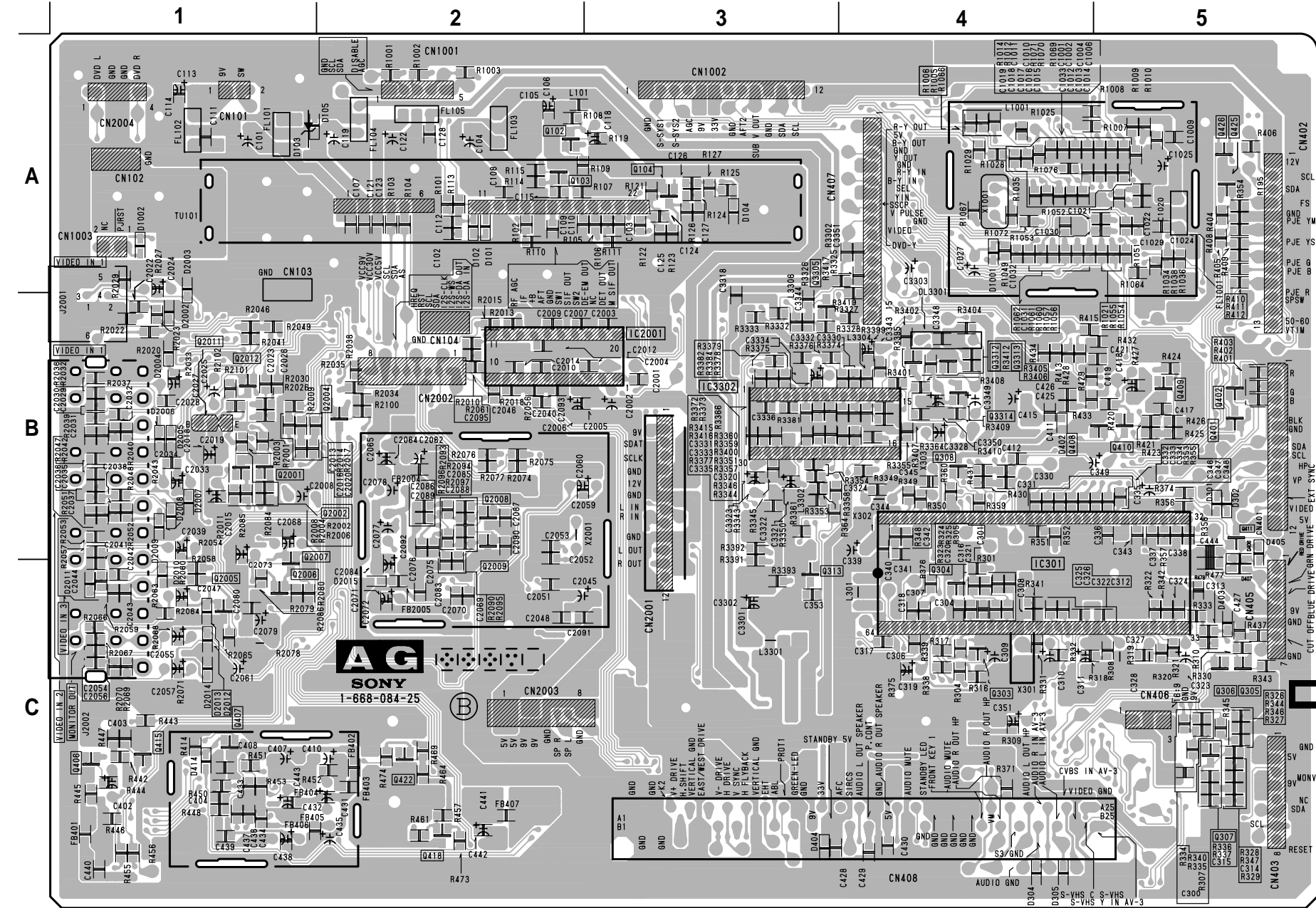
Note: The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

Terminal name of semiconductors in silk screen printed circuit (\*):

Device	Printed symbol	Terminal name	Circuit
① Transistor		Base Emitter	
② Transistor		Collector Base Emitter	
③ Diode		Cathode Anode	
④ Diode		Cathode Anode (NC)	
⑤ Diode		Cathode Anode (NC)	
⑥ Diode		Common Anode Cathode	
⑦ Diode		Common Anode Cathode	
⑧ Diode		Common Anode Cathode	
⑨ Diode		Common Anode Cathode	
⑩ Diode		Common Anode Cathode	
⑪ Diode		Common Anode Cathode	
⑫ Diode		Common Anode Cathode	
⑬ Transistor (FET)		Drain Source Gate	
⑭ Transistor (FET)		Drain Source Gate	
⑮ Transistor (FET)		Drain Source Gate	
⑯ Transistor		Emitter Collector Base	
⑰ Transistor		C1 B1 E1 C2 B2 E2	
⑱ Transistor		C1 B2 E2 C2 B1 E1	
⑲ Transistor		C1 B2 E2 C2 B1 E1	
⑳ Transistor		C1 B2 E2 C2 B1 E1	
㉑ Transistor		C1 B2 E2 C2 B1 E1	
㉒ Transistor		C1 B2 E2 C2 B1 E1	
㉓ Transistor		C1 B2 E2 C2 B1 E1	
—		Discrete semiconductor	

(Chip semiconductors that are not actually used are included.)

— AG BOARD (Conductor Side) —

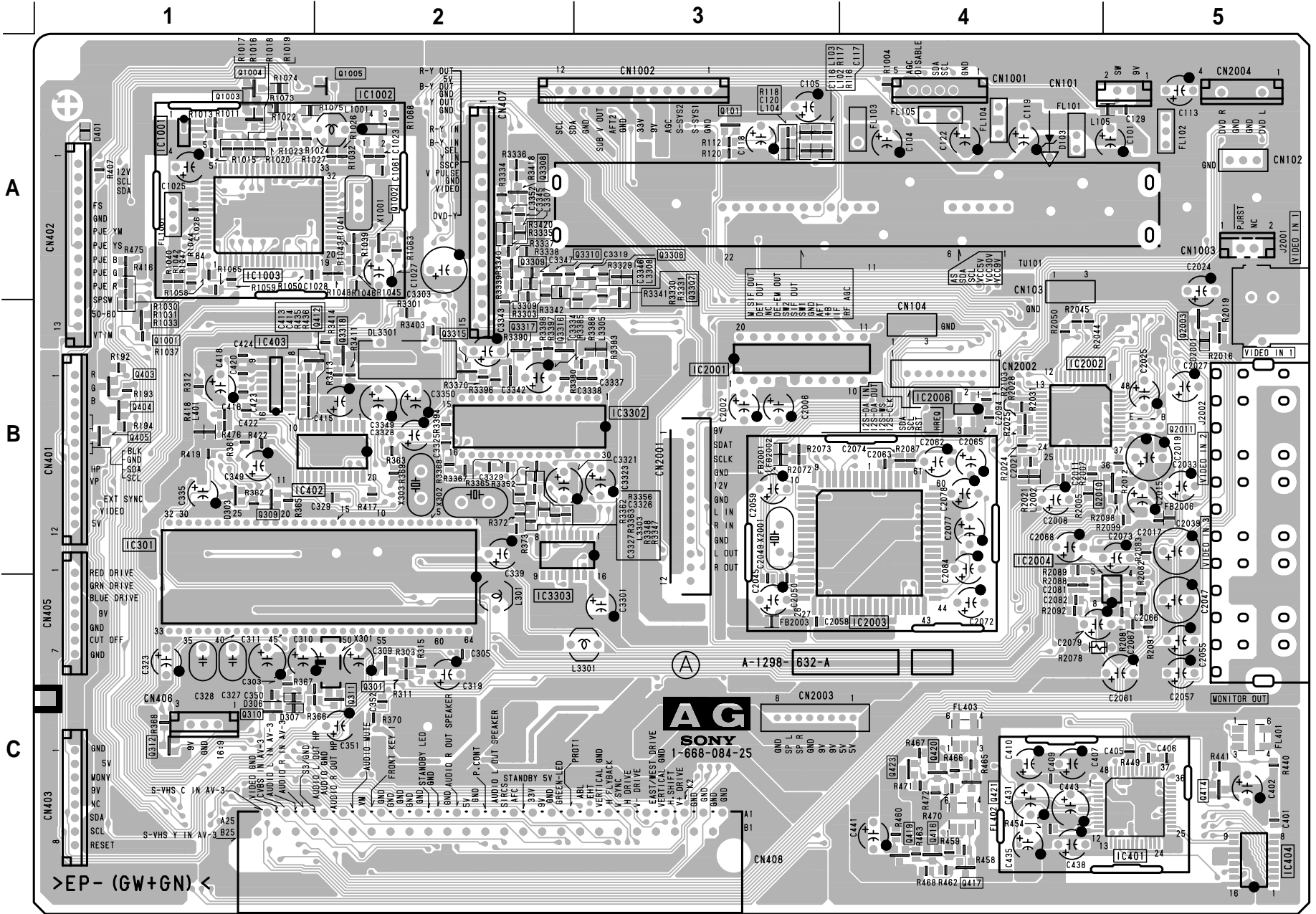


• AG BOARD SEMICONDUCTOR LOCATION

IC	(Conductor Side)	(Component Side)	Location
IC301	B-4	B-1	Q425
IC401	B-5	B-1	Q426
IC402	B-2	B-1	Q2001
IC403	B-1	B-5	Q2002
IC404	C-5	B-5	Q2003
IC1001	A-1	B-5	Q2004
IC1002	A-2	B-5	Q2005
IC1003	A-1	B-5	Q2006
IC2001	B-3	B-5	Q2007
IC2002	B-3	B-5	Q2008
IC2003	C-4	B-5	Q2009
IC2004	C-4	B-5	Q2010
IC2006	B-4	B-5	Q2011
			Q2012
TRANSISTOR	(Conductor Side)	(Component Side)	Location
Q101	A-2	A-3	D101
Q102	A-2	A-3	D102
Q103	A-2	A-3	D103
Q104	A-3	A-3	D104
Q301	C-2	B-5	D301
Q303	C-4	B-5	D303
Q304	C-4	B-5	D304
Q308	B-4	B-5	D308
Q309	B-1	B-5	D309
Q310	C-1	B-5	D310
Q311	C-2	B-5	D311
Q312	C-1	B-5	D312
Q313	C-3	B-5	D313
Q401	B-5	B-5	D401
Q402	B-5	B-5	D402
Q403	B-1	B-5	D403
Q404	B-1	B-5	D404
Q405	B-1	B-5	D405
Q406	C-1	B-5	D406
Q407	C-1	B-5	D407
Q408	B-4	B-5	D408
Q409	B-5	B-5	D409
Q410	B-5	B-5	D410
Q412	B-2	B-5	D412
Q414	C-5	B-5	D414
Q415	C-1	B-5	D415
Q416	C-4	B-5	D416
Q417	C-4	B-5	D417
Q418	C-2	B-5	D418
Q419	C-4	B-5	D419
Q420	C-4	B-5	D420
Q421	C-4	B-5	D421
Q422	C-2	B-5	D422
Q423	C-4	B-5	D423
CRYSTAL	(Conductor Side)	(Component Side)	Location
X301	C-4	C-2	X301
X302	B-4	B-2	X302
X303	B-4	B-2	X303
X1001	A-4	A-2	X1001
X2001	B-2	B-3	X2001



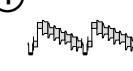
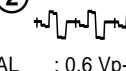
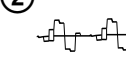
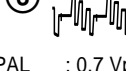

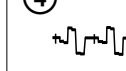
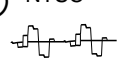
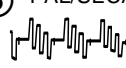
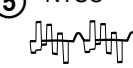



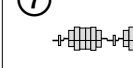





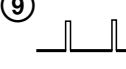
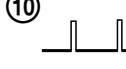
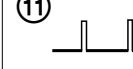
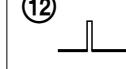


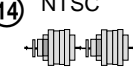








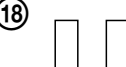

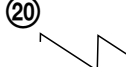
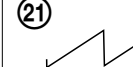
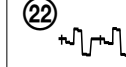

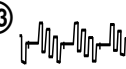
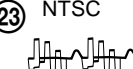




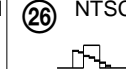
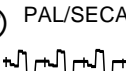



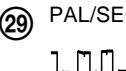

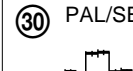

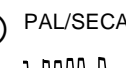
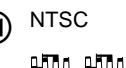
※: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 59)

— AG BOARD (Component Side) —





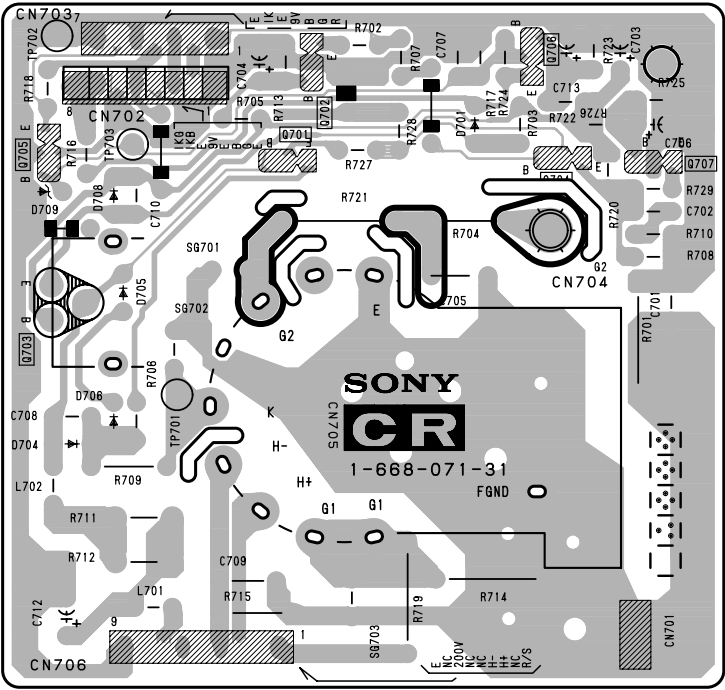


① PAL  0.9 Vp-p (H)	① NTSC  1.0 Vp-p (H)	① SECAM  0.9 Vp-p (H)	② PAL  PAL : 0.6 Vp-p (H) SECAM : 1.1 Vp-p (H)	② NTSC  0.7 Vp-p (H)	③ PAL  PAL : 0.7 Vp-p (H) SECAM : 1.5 Vp-p (H)	③ NTSC  0.8 Vp-p (H)	④ PAL/SECAM  1.1 Vp-p (H)
④ NTSC  1.3 Vp-p (H)	⑤ PAL/SECAM  1.4 Vp-p (H)	⑤ NTSC  1.6 Vp-p (H)	⑥ PAL  0.9 Vp-p (H)	⑥ NTSC  1.0 Vp-p (H)	⑥ SECAM  1.0 Vp-p (H)	⑦ PAL  0.5 Vp-p (H)	⑦ NTSC  0.6 Vp-p (H)
⑦ SECAM  1.0 Vp-p (H)	⑧ PAL  1.5 Vp-p (H)	⑧ NTSC  1.8 Vp-p (H)	⑧ SECAM  1.6 Vp-p (H)	⑨  4.6 Vp-p (H)	⑩  5.3 Vp-p (V)	⑪  5.3 Vp-p (V)	⑫  4.6 Vp-p (H)
⑬  5.0 Vp-p (4MHz)	⑭ PAL  0.5 Vp-p (H)	⑭ NTSC  1.0 Vp-p (H)	⑭ SECAM  1.2 Vp-p (H)	⑭ PAL  0.8 Vp-p (H)	⑭ NTSC  1.0 Vp-p (H)	⑭ SECAM  1.0 Vp-p (H)	⑭ PAL  0.9 Vp-p (H)
⑯ NTSC  1.0 Vp-p (H)	⑯ SECAM  1.0 Vp-p (H)	⑰  4.8 Vp-p (H)	⑱  4.9 Vp-p (H)	⑲  0.5 Vp-p (V)	⑳  1.3 Vp-p (V)	㉑  1.3 Vp-p (V)	㉒  PAL : 0.6 Vp-p (H) SECAM : 1.1 Vp-p (H)
㉓ NTSC  0.7 Vp-p (H)	㉓ PAL  PAL : 0.7 Vp-p (H) SECAM : 1.5 Vp-p (H)	㉓ NTSC  0.8 Vp-p (H)	㉔ PAL/SECAM  1.0 Vp-p (H)	㉔ NTSC  1.1 Vp-p (H)	㉔ PAL  4.5 Vp-p (H)	㉔ PAL/SECAM  0.9 Vp-p (H)	㉔ NTSC  1.1 Vp-p (H)
㉔ PAL/SECAM  1.1 Vp-p (H)	㉔ NTSC  1.3 Vp-p (H)	㉔ PAL/SECAM  1.4 Vp-p (H)	㉔ NTSC  1.6 Vp-p (H)	㉔ PAL/SECAM  3.4 Vp-p (H)	㉔ NTSC  4.2 Vp-p (H)	㉔ PAL/SECAM  3.4 Vp-p (H)	㉔ NTSC  3.8 Vp-p (H)
㉔ PAL/SECAM  3.4 Vp-p (H)	㉔ NTSC  3.8 Vp-p (H)						



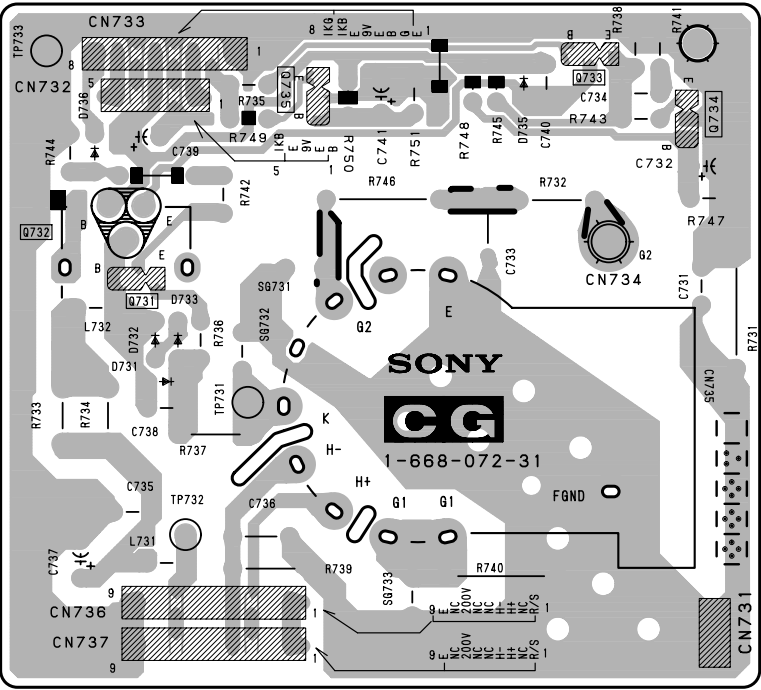
**CR** [RED AMP]

— CR BOARD —



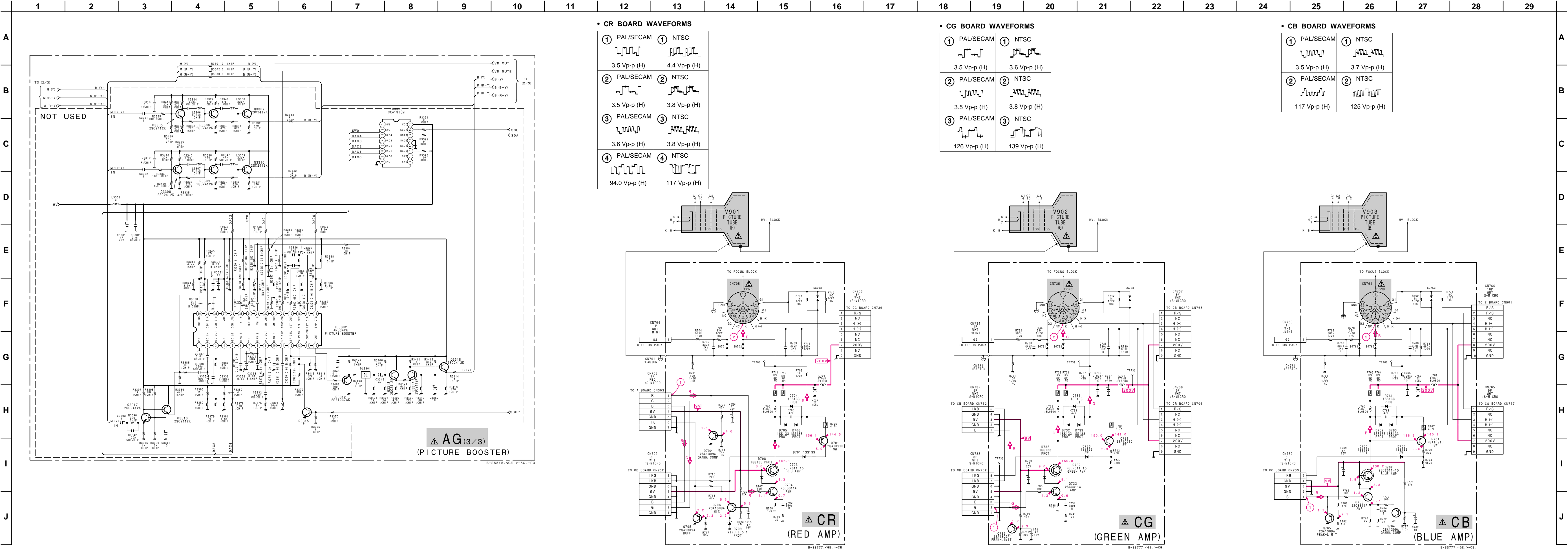
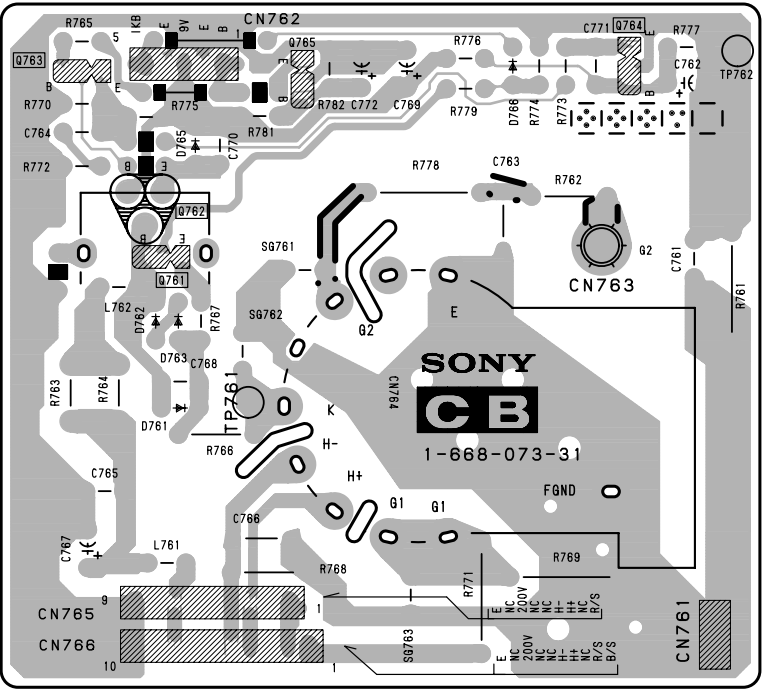
**CG** [GREEN AMP]

— CG BOARD —



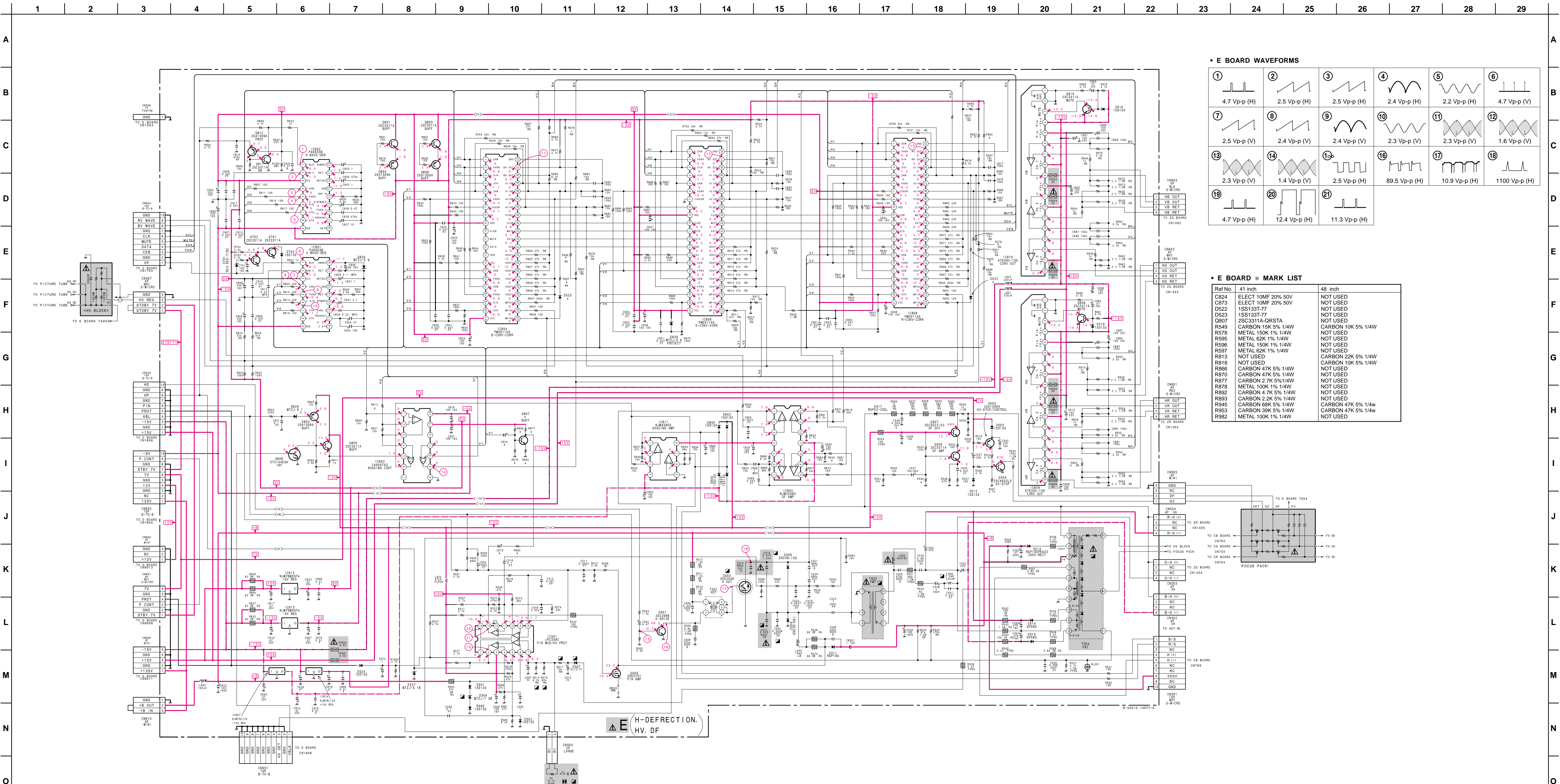
**CB** [BLUE AMP]

— CB BOARD —

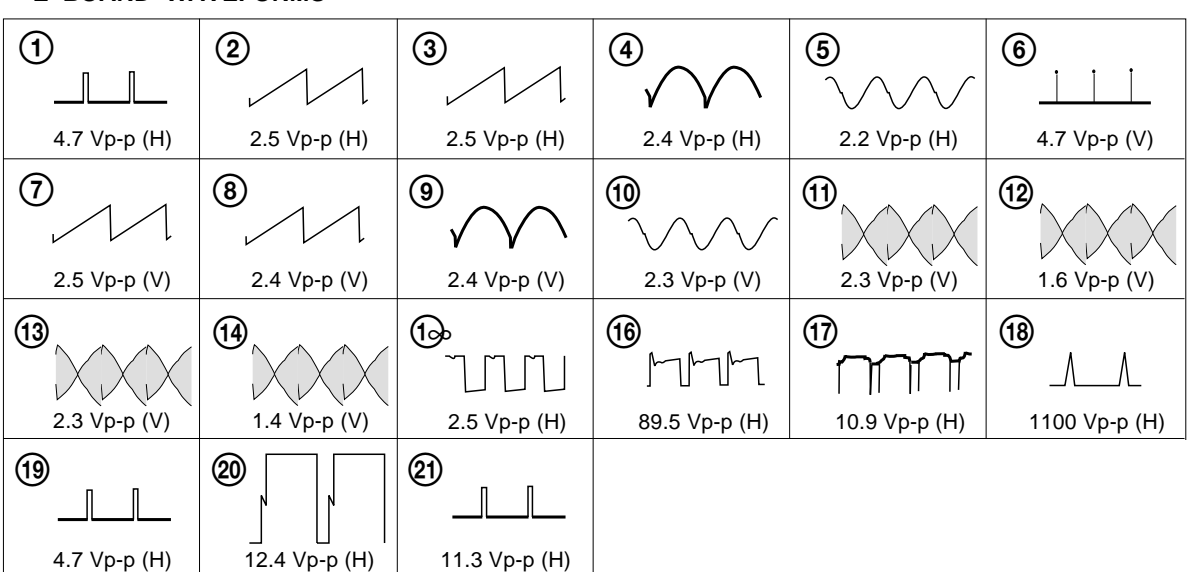




(4) Schematic Diagram of E Board



• E BOARD WAVEFORMS

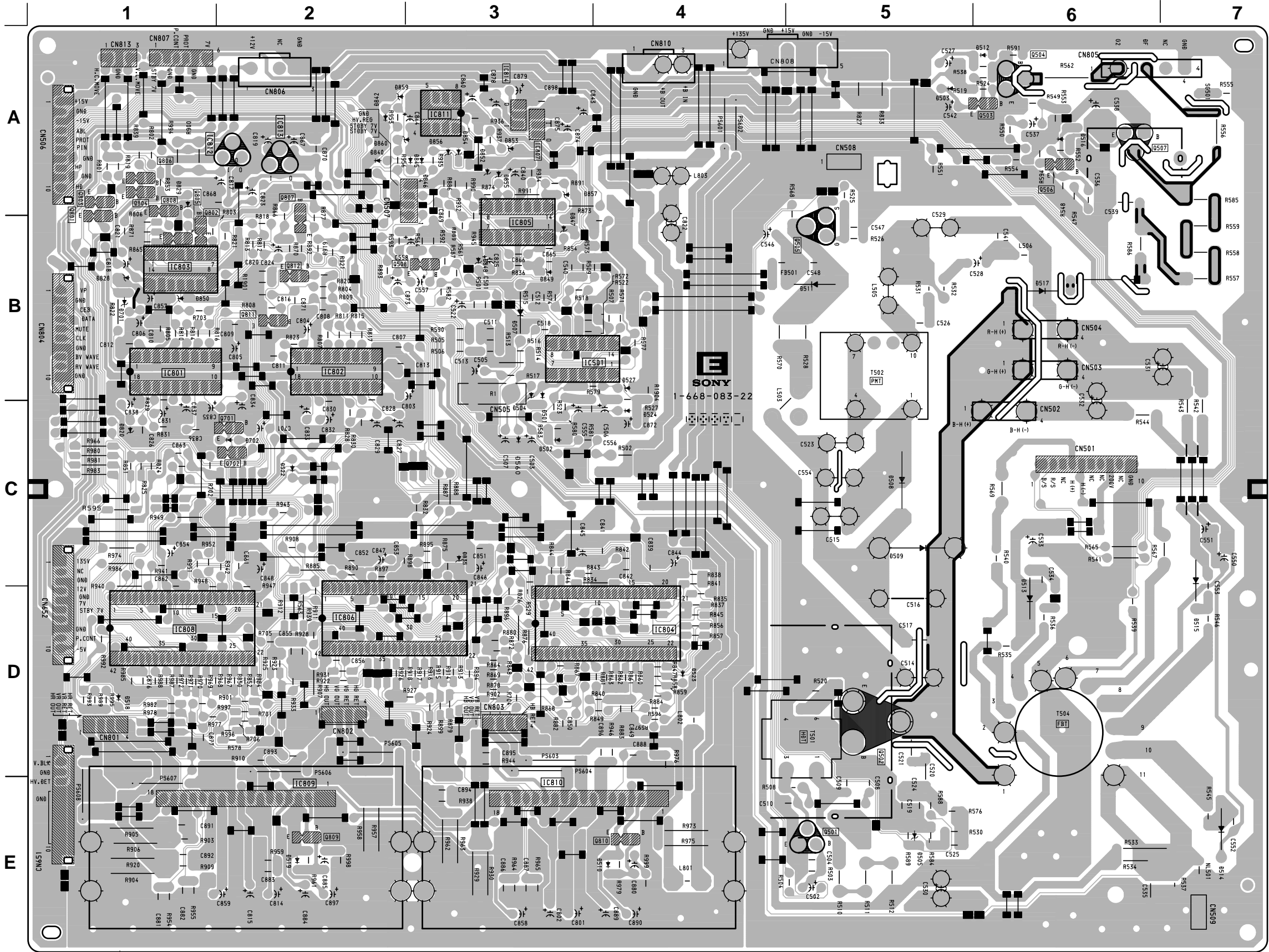


• E BOARD \* MARK LIST

Ref No.	41 inch	48 inch
C824	ELECT 10MF 20% 50V	NOT USED
C873	ELECT 10MF 20% 50V	NOT USED
D522	1SS133T-77	NOT USED
D523	1SS133T-77	NOT USED
Q807	2SC3311A-QRSTA	NOT USED
R549	CARBON 15K 5% 1/4W	CARBON 10K 5% 1/4W
R578	METAL 150K 1% 1/4W	NOT USED
R595	METAL 62K 1% 1/4W	NOT USED
R596	METAL 150K 1% 1/4W	NOT USED
R597	METAL 62K 1% 1/4W	NOT USED
R813	NOT USED	CARBON 22K 5% 1/4W
R818	NOT USED	CARBON 10K 5% 1/4W
R866	CARBON 47K 5% 1/4W	NOT USED
R870	CARBON 47K 5% 1/4W	NOT USED
R877	CARBON 2.7K 5% 1/4W	NOT USED
R878	METAL 100K 1% 1/4W	NOT USED
R892	CARBON 4.7K 5% 1/4W	NOT USED
R893	CARBON 2.2K 5% 1/4W	NOT USED
R945	CARBON 68K 5% 1/4W	CARBON 47K 5% 1/4W
R953	CARBON 39K 5% 1/4W	CARBON 47K 5% 1/4W
R982	METAL 100K 1% 1/4W	NOT USED

**E** H-DEFLECTION,  
HV, DF

— E BOARD —



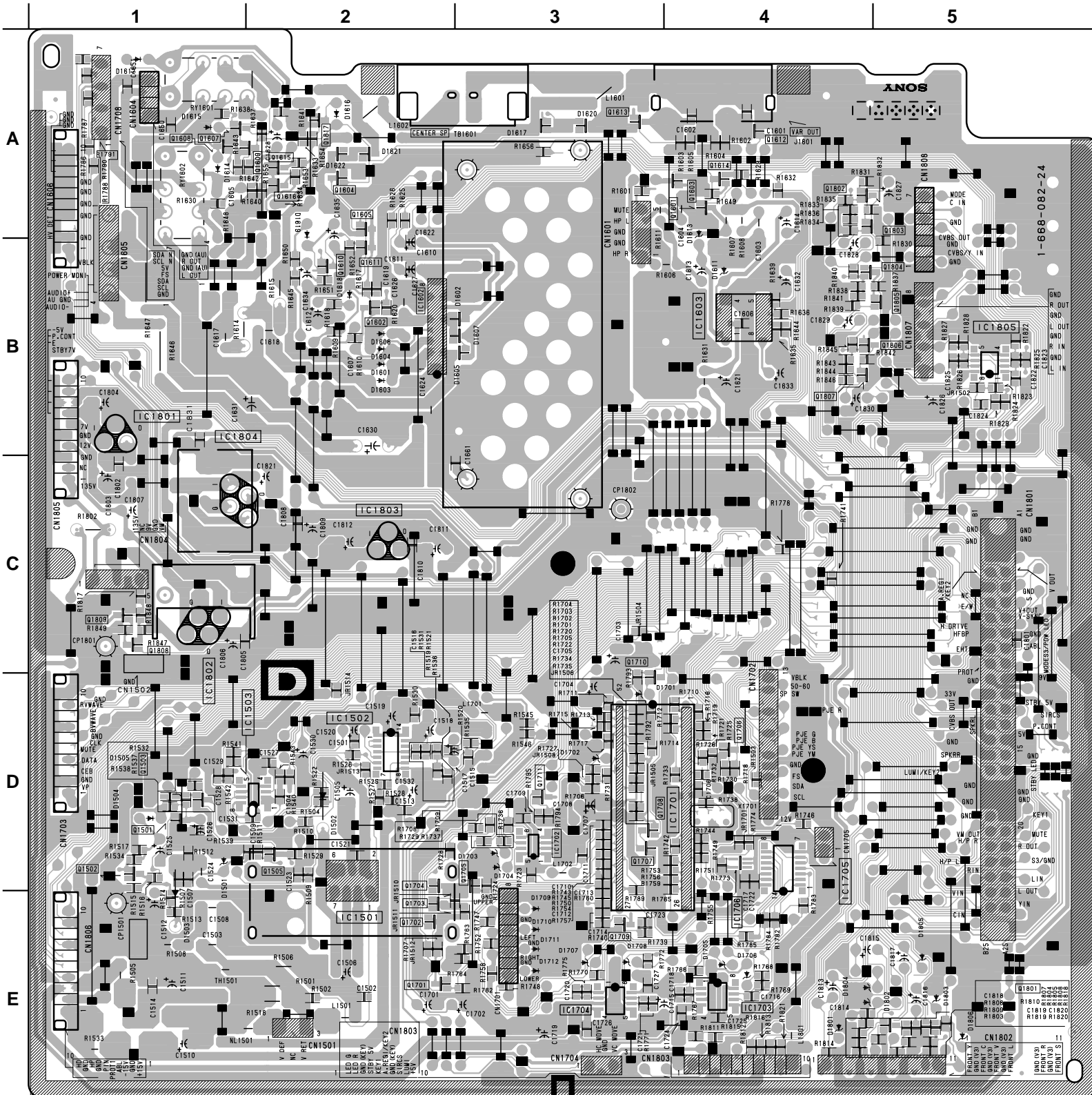
• E BOARD SEMICONDUCTOR LOCATION

IC		Q810	E-4
IC501		Q811	B-2
IC801		Q812	B-2
IC802		DIODE	
IC803		*	
IC804		D501	B-3
IC805		D502	C-3
IC806		D503	A-5
IC807		D504	B-3
IC808		D507	B-3
IC809		D508	C-5
IC810		D509	C-5
IC811		D510	E-4
IC812		D511	B-5
IC813		D512	A-6
		D513	C-6
		D514	E-7
		D515	C-7
		D517	B-6
		D519	E-2
		D520	C-7
		D521	C-6
		D522	C-2
		D523	D-4
		D524	C-4
		D527	B-4
		D701	B-1
		D702	C-2
		D820	C-1
		D829	A-1
		D835	C-3
		D840	A-3
		D842	A-3
		D845	A-3
		D846	A-3
TRANSISTOR			
Q501		*	
Q502		E-5	
Q503		D-5	
Q504		A-6	
Q505		B-5	
Q506		A-6	
Q507		A-6	
Q701		C-2	
Q702		C-2	
Q801		A-1	
Q802		B-1	
Q803		A-1	
Q804		A-1	
Q805		B-1	
Q806		A-1	
Q807		A-2	
Q808		A-1	
Q809		E-2	

※: Refer to Terminal name of semiconductors in silk  
screen printed circuit (see page 59)



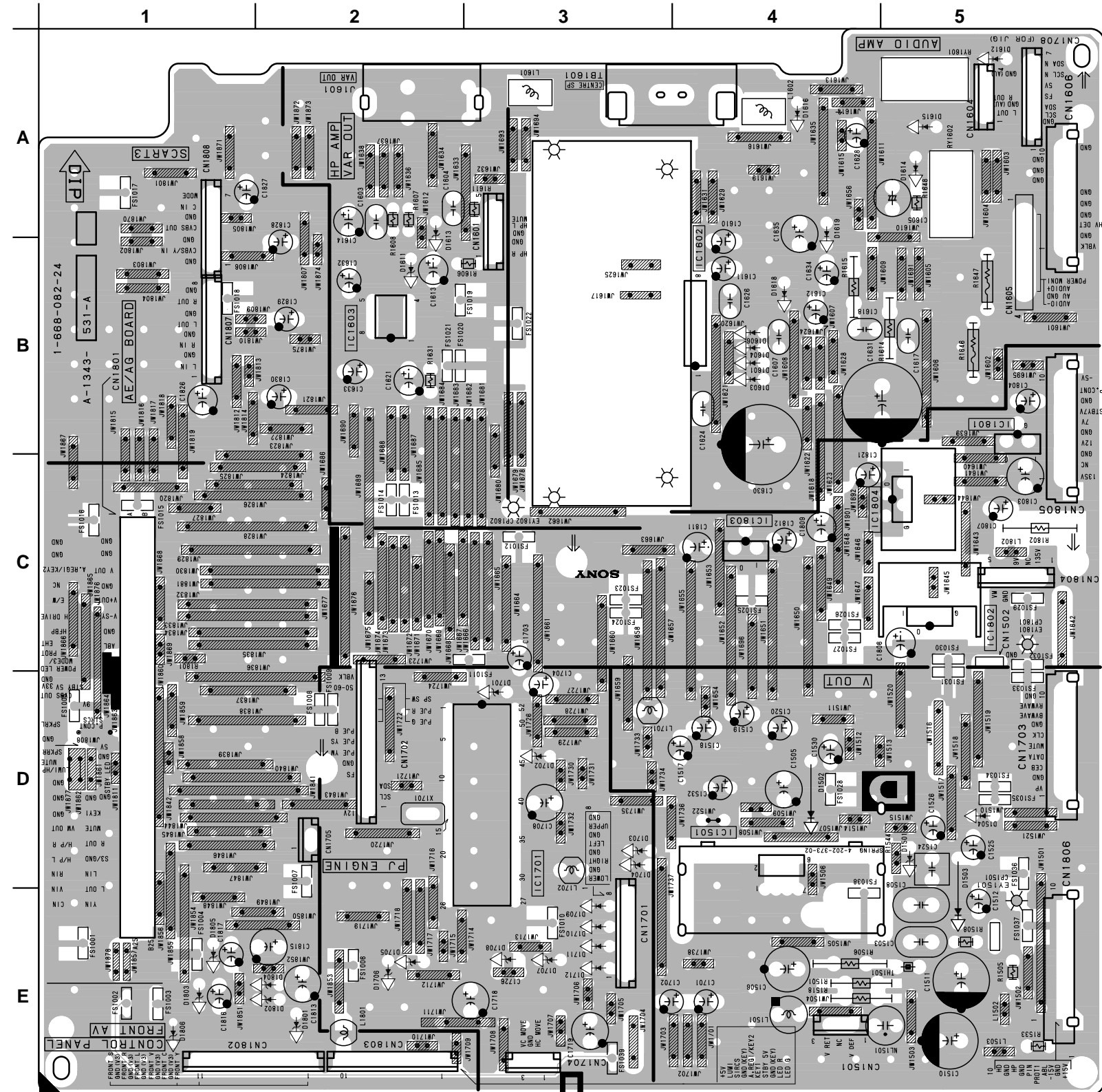
— D BOARD (Conductor Side) —



— D BOARD (Component Side) —

IC			Q1711	D-3	①
(Conductor Side) (Component Side)			Q1801	E-4	①
IC1501	E-2	D-4	Q1802 <td>A-4</td> <td>①</td>	A-4	①
IC1502	D-2		Q1803 <td>A-4</td> <td>①</td>	A-4	①
IC1503	D-2		Q1804 <td>B-4</td> <td>①</td>	B-4	①
IC1602	B-2	B-4	Q1805	B-4	①
IC1603	B-4	B-2	Q1806	B-4	①
IC1701	D-3	D-3	Q1807	B-4	①
IC1702	D-3		Q1808	C-1	①
IC1703	E-4		Q1809	C-1	①
IC1704	E-3				
IC1706	D-4		DIODE		
IC1801	B-1	B-5	(Conductor Side) (Component Side)*		
IC1802	C-1	C-5	D1501	D-1	D-4 -
IC1803	C-2	C-4	D1502	D-2	D-4 -
IC1804	C-1	C-4	D1503	D-1	D-5 -
IC1805	B-5		D1504	D-1	D-5 -
			D1505	D-1	③
TRANSISTOR			D1601	B-2	B-4 -
(Conductor Side) (Component Side)*			D1603	B-2	B-4 -
Q1501	D-1	①	D1604	B-2	B-4 -
Q1502	D-1	①	D1606	B-2	B-4 -
Q1503	D-1	①	D1611	B-4	B-2 -
Q1505	D-2	①	D1612	A-1	A-5 -
Q1601	A-4	①	D1613	A-4	A-2 -
Q1602	B-2	①	D1614	A-1	A-4 -
Q1603	A-4	①	D1615	A-1	A-5 -
Q1604	A-2	①	D1616	A-2	A-4 -
Q1605	A-2	①	D1617	A-3	④
Q1607	A-1	①	D1618	B-2	B-4 -
Q1608	A-1	①	D1619	A-2	A-4 -
Q1609	A-2	①	D1620	A-3	④
Q1610	B-2	①	D1621	A-2	④
Q1611	B-2	①	D1622	A-2	④
Q1612	A-4	①	D1703	D-3	D-3 -
Q1613	A-3	①	D1704	D-3	D-3 -
Q1614	A-4	①	D1705	E-4	E-2 -
Q1615	A-2	①	D1706	E-4	E-2 -
Q1616	A-2	①	D1707	E-3	E-3 -
Q1617	A-2	①	D1708	E-3	E-3 -
Q1701	E-2	①	D1709	E-3	E-3 -
Q1702	E-2	①	D1710	E-3	E-3 -
Q1703	E-2	①	D1711	E-3	E-3 -
Q1704	D-2	①	D1712	E-3	E-3 -
Q1705	D-2	①	D1801	E-4	E-2 -
Q1706	D-4	①	D1802	E-4	E-2 -
Q1707	D-3	①	D1803	E-5	E-1 -
Q1708	D-3	①	D1804	E-4	E-2 -
Q1709	E-3	①	D1805	E-5	E-1 -
Q1710	C-3	①	D1806	E-5	E-1 -

\*: Refer to Terminal name of semiconductors in silk screen printed circuit (see page 59)

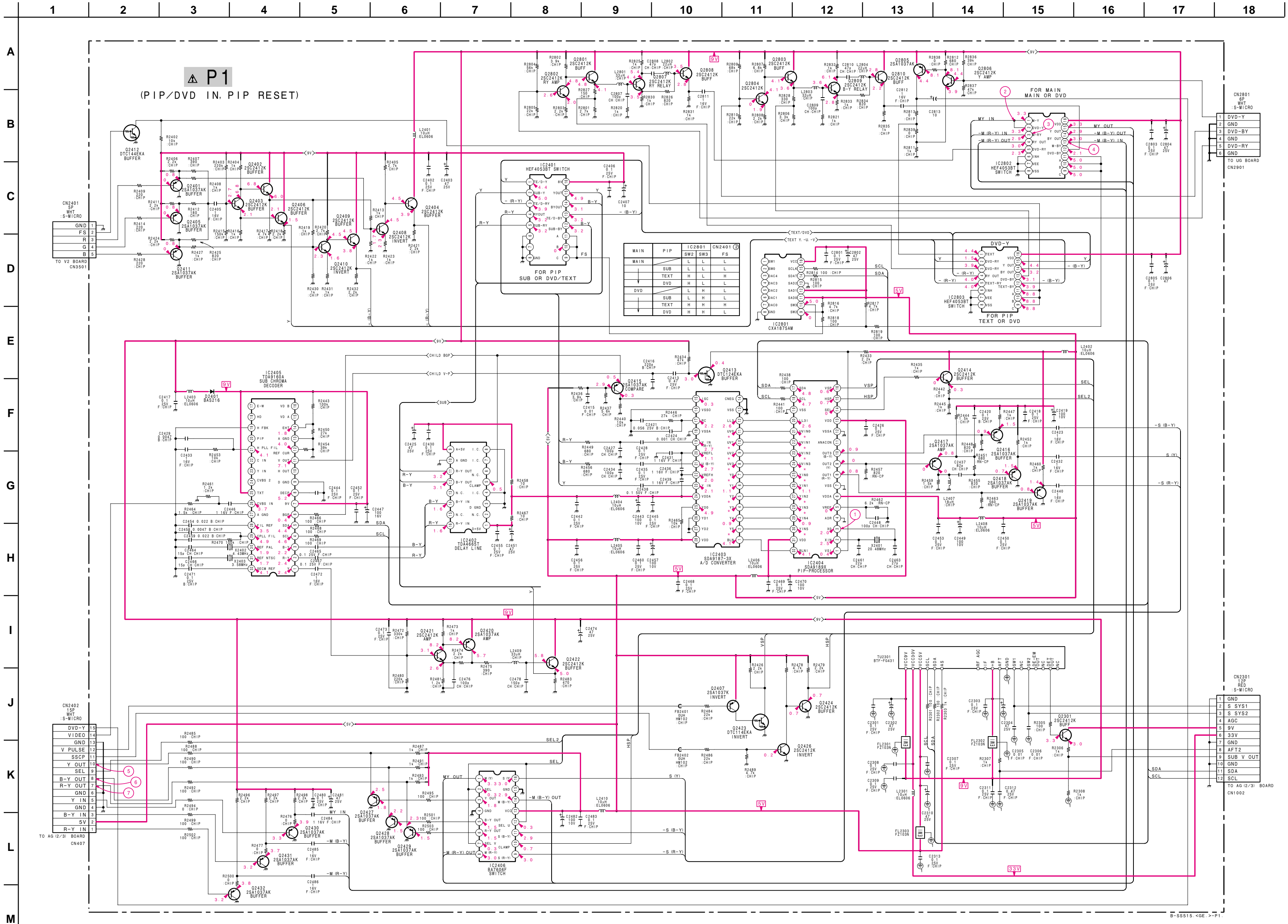
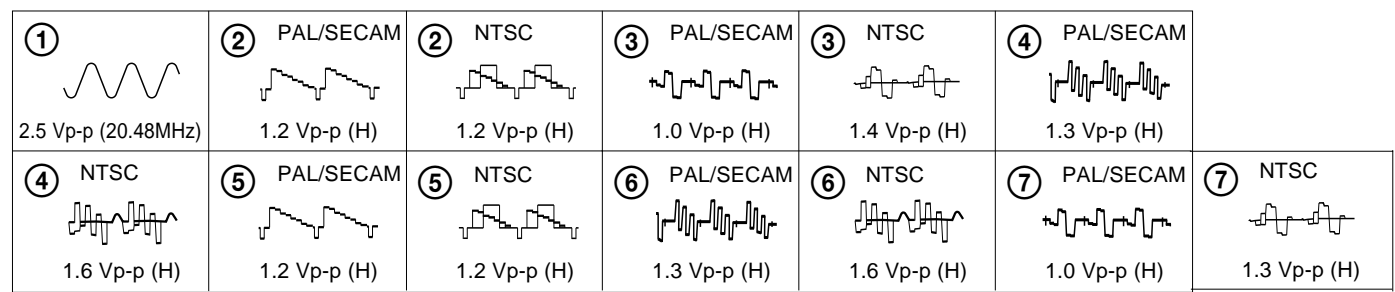




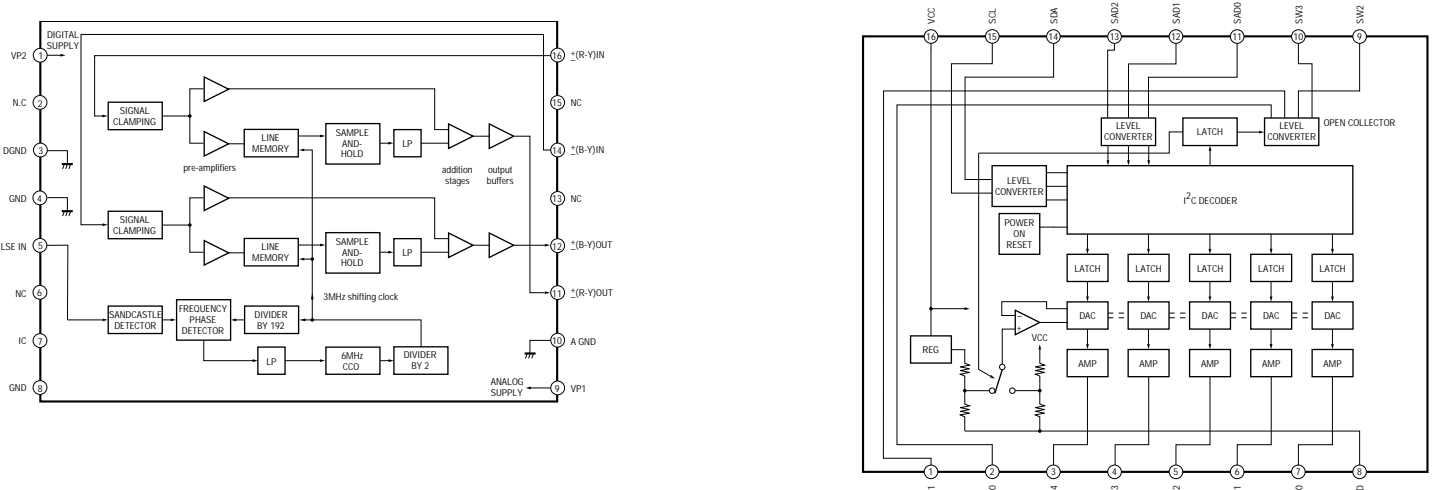


(6) Schematic Diagrams of P1 and V2 Boards

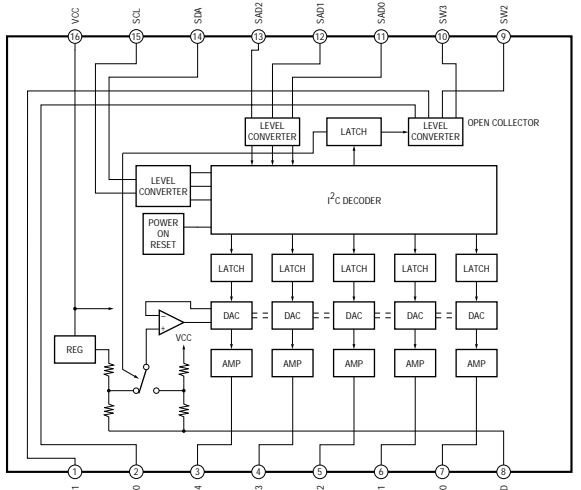
• P1 BOARD WAVEFORMS



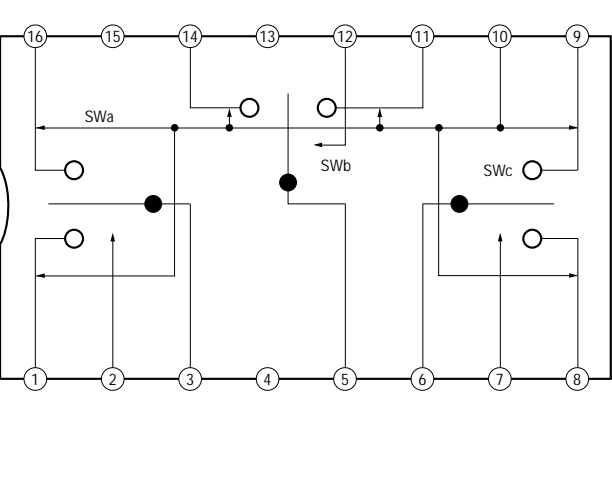
P1 BOARD : IC2402 TDA4465T



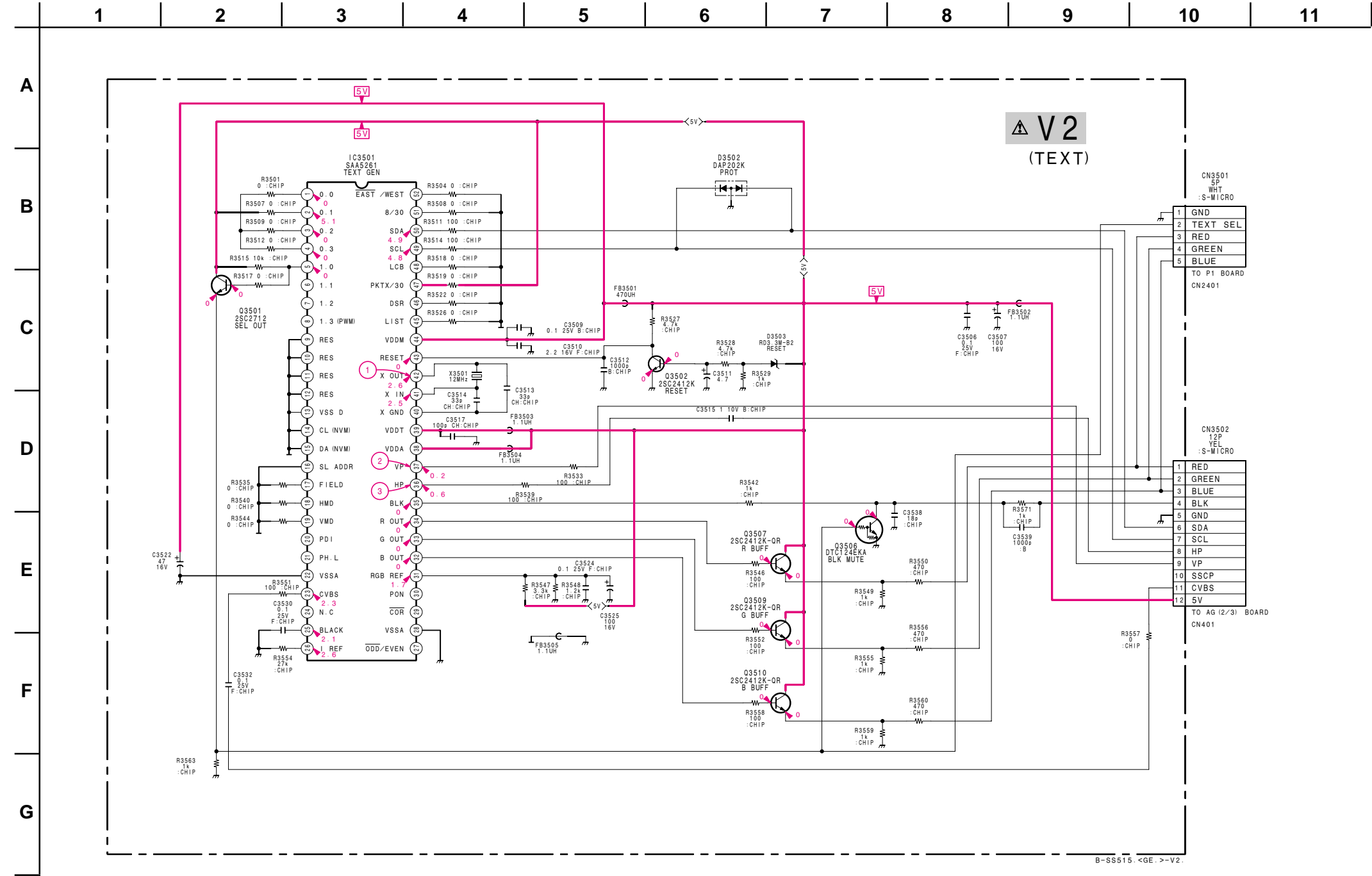
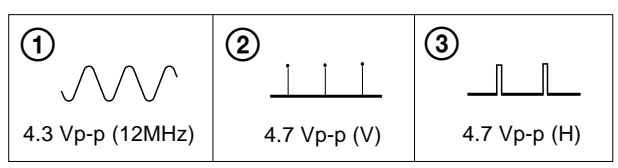
P1 BOARD : IC2801 CXA1875AM



P1 BOARD IC2406 BA7606F



• V2 BOARD WAVEFORMS



PIP/DVD IN,  
PIP TEXT

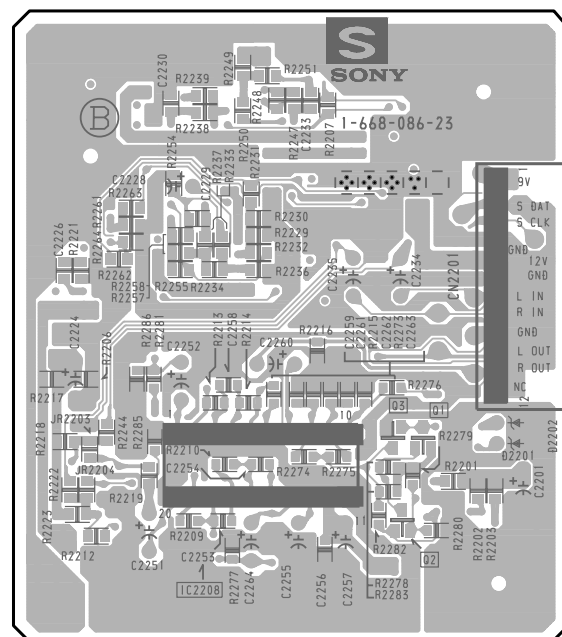
[TEXT]

Ref.	*
D3502	⑩
D3503	④
Q3501, Q2502, Q3506, Q3507, Q3509, Q3510	①

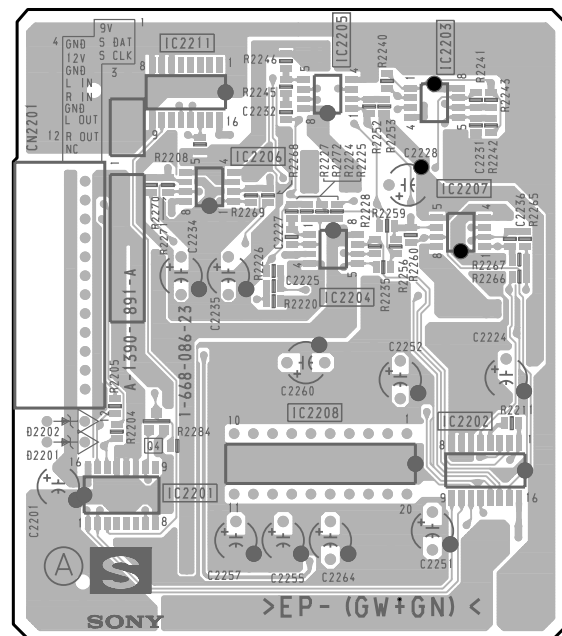
Ref.	*
D2401	③
Q2301, Q2406, Q2409, Q2410, Q2413-Q2418, Q2427-Q2432, Q2801, Q2803, Q2807, Q2809, Q2810	①
Q2401-Q2405, Q2407, Q2408, Q2411, Q2412, Q2419-Q2424, Q2426, Q2802, Q2804-Q2806, Q2808	②

# S [SURROUND]

## — S BOARD (Conductor Side) —



## — S BOARD (Component Side) —



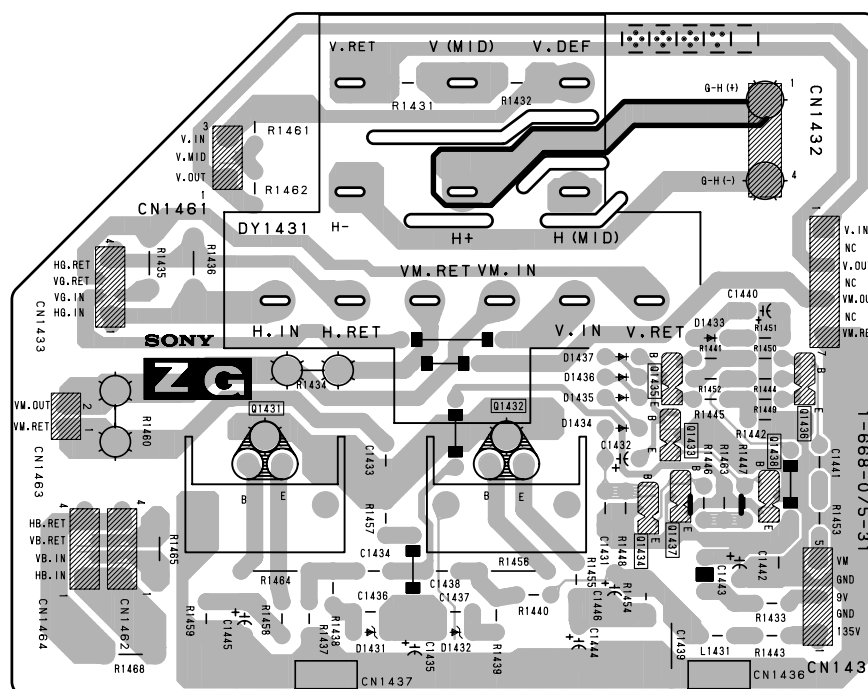
### S BOARD Terminal name of semiconductors in silk screen printed circuit (\*)

Ref.	*
Q4	②

※: Refer to Terminal name of  
semiconductors in silk screen  
printed circuit (see page 59)

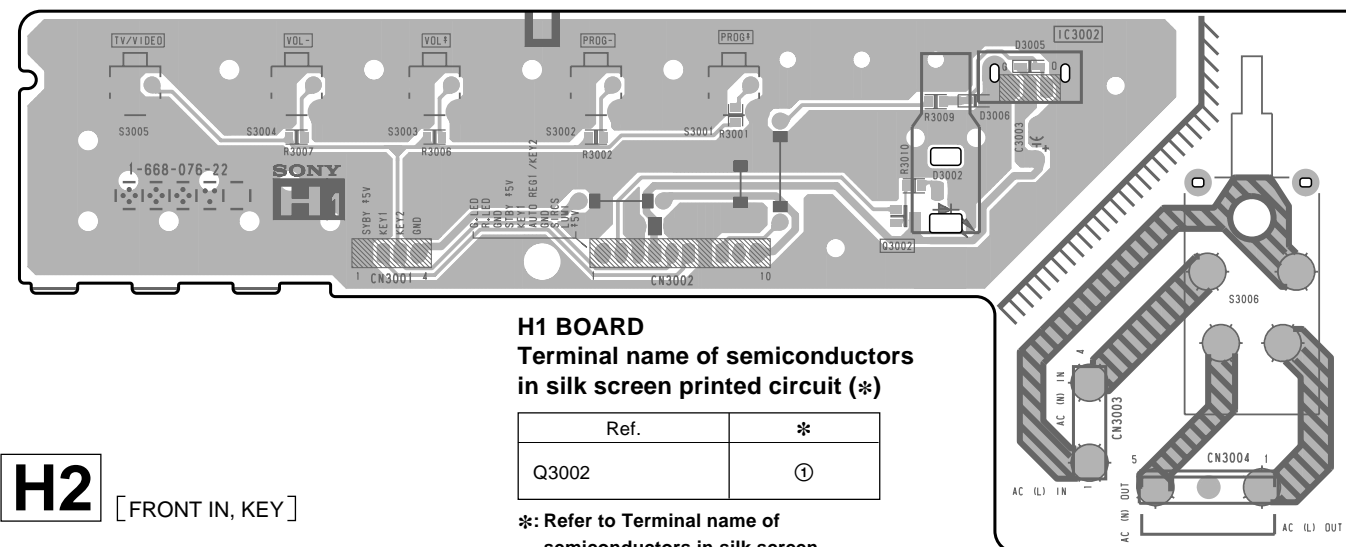
# ZG [VM/GREEN DY]

## — ZG BOARD —



# H1 [KEY, LED, AC SW]

## — H1 BOARD —



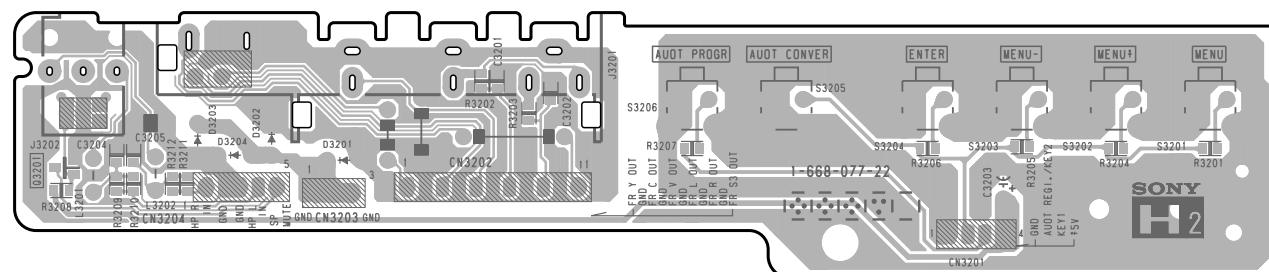
### H1 BOARD Terminal name of semiconductors in silk screen printed circuit (\*)

Ref.	*
Q3002	①

※: Refer to Terminal name of  
semiconductors in silk screen  
printed circuit (see page 59)

# H2 [FRONT IN, KEY]

## — H2 BOARD —

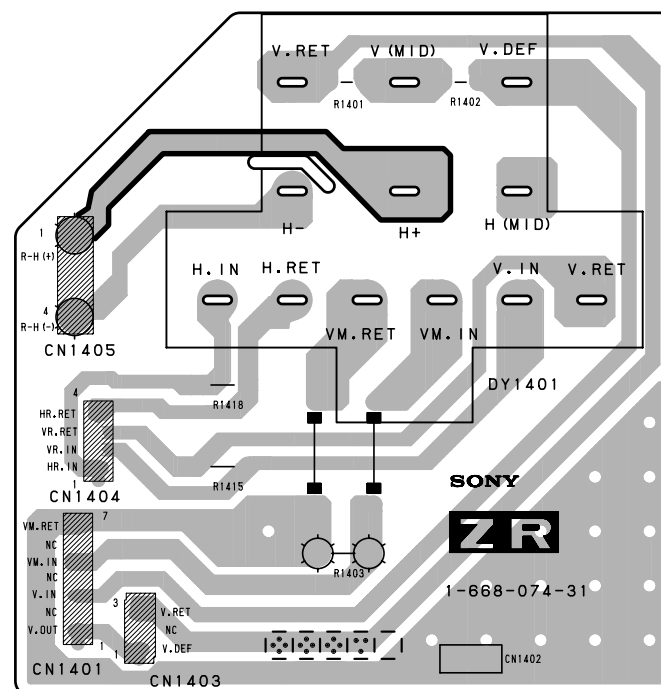


### H2 BOARD Terminal name of semiconductors in silk screen printed circuit (\*)

Ref.	*
Q3201	①

※: Refer to Terminal name of  
semiconductors in silk screen  
printed circuit (see page 59)

# ZR [RED DY] — ZR BOARD —

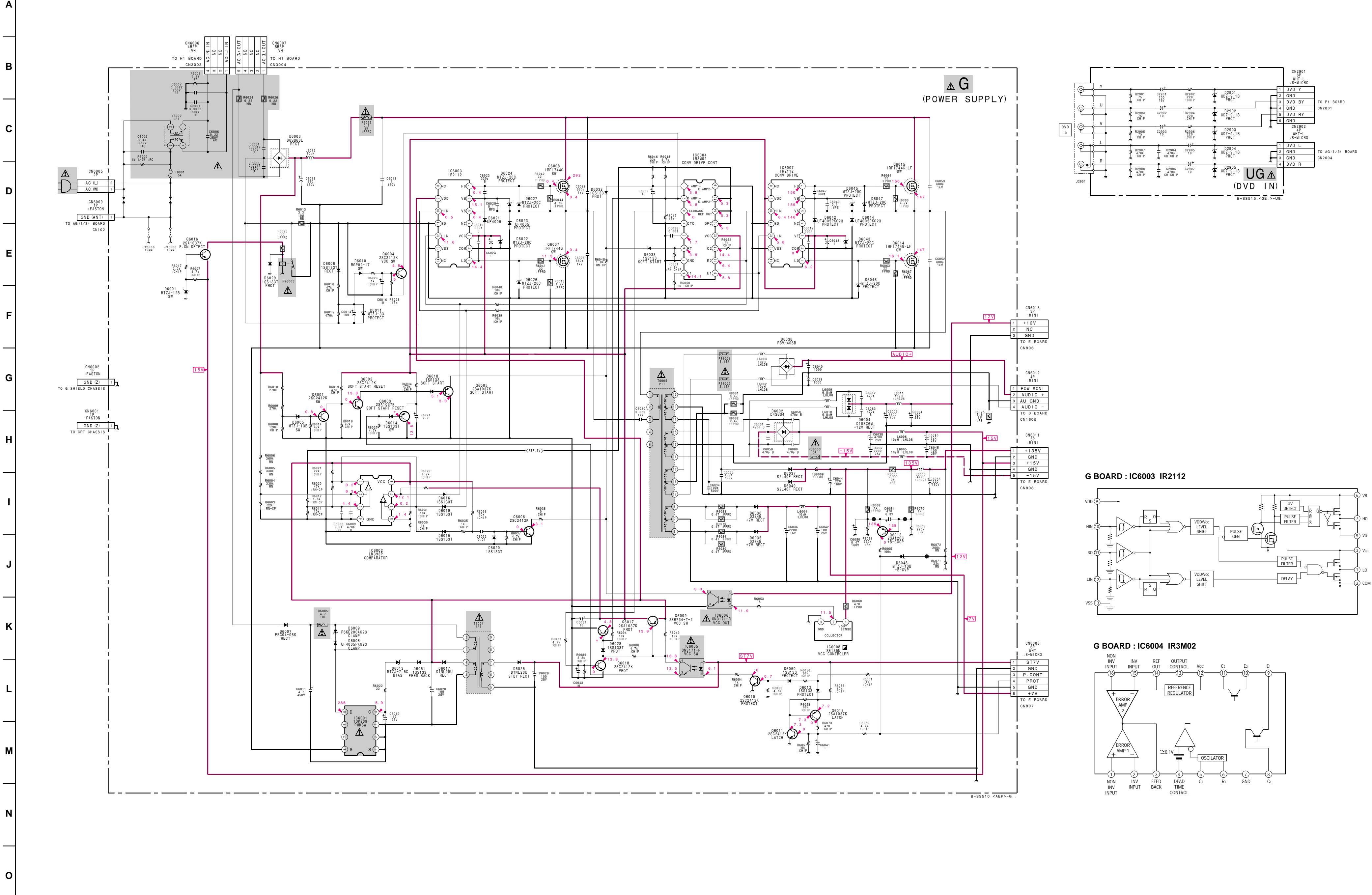




The schematic diagrams of the Sony CCD-1900 camera are organized into several functional blocks, each labeled with a letter and a number. The blocks are as follows:

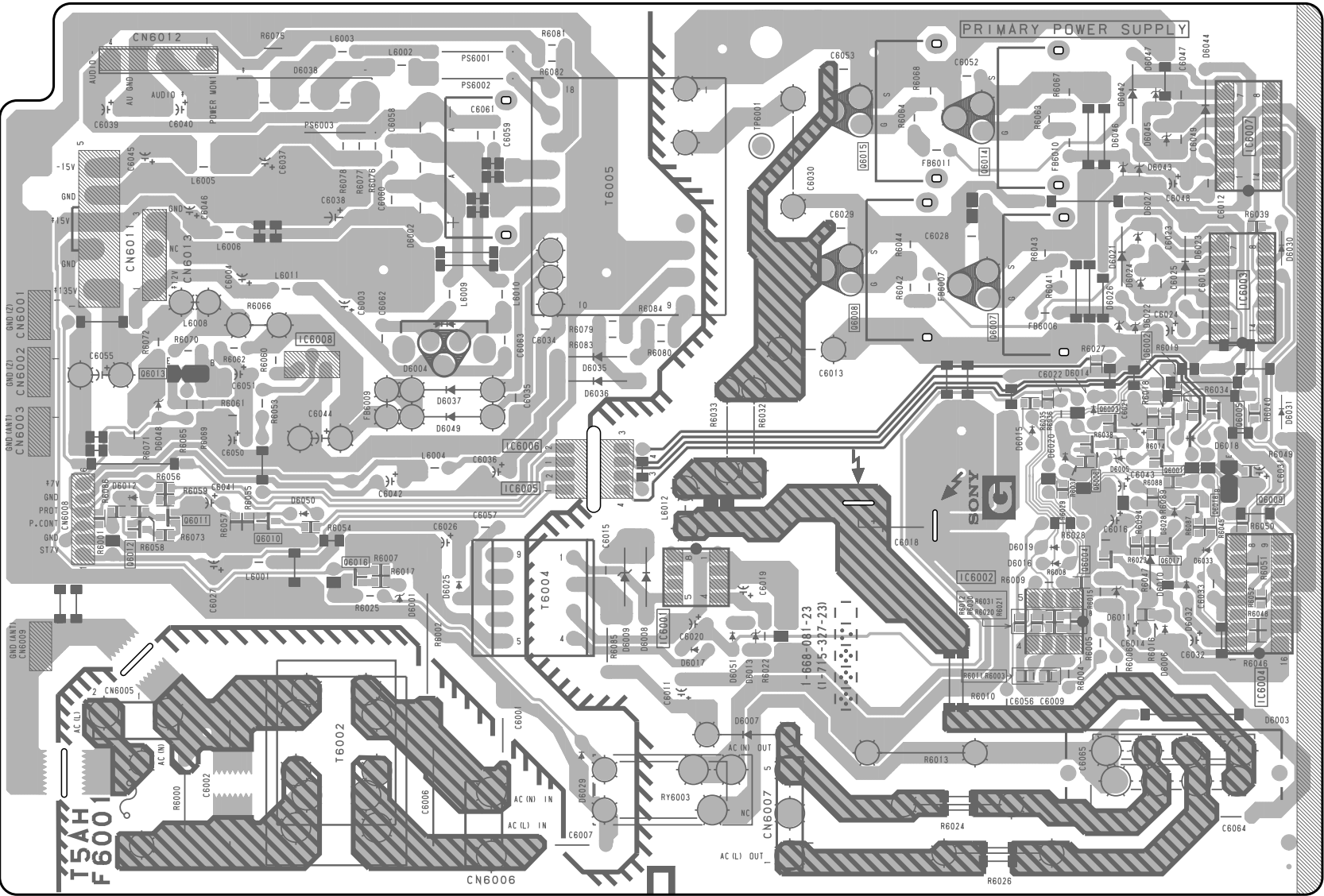
- Block A (Top Left):** Video input and processing section, including connectors for DY (H), SUB DY, DY (V), and VM. It features various resistors (R1435, R1436, R1437, R1438, R1439, R1440, R1441, R1442, R1443, R1444, R1445, R1446, R1447, R1448, R1449, R1450, R1451, R1452, R1453, R1454, R1455, R1456, R1457, R1458, R1459, R1460, R1461, R1462, R1463, R1464, R1465, R1466, R1467, R1468, R1469, R1470, R1471, R1472, R1473, R1474, R1475, R1476, R1477, R1478, R1479, R1480, R1481, R1482, R1483, R1484, R1485, R1486, R1487, R1488, R1489, R1490, R1491, R1492, R1493, R1494, R1495, R1496, R1497, R1498, R1499, R1500, R1501, R1502, R1503, R1504, R1505, R1506, R1507, R1508, R1509, R1510, R1511, R1512, R1513, R1514, R1515, R1516, R1517, R1518, R1519, R1520, R1521, R1522, R1523, R1524, R1525, R1526, R1527, R1528, R1529, R1530, R1531, R1532, R1533, R1534, R1535, R1536, R1537, R1538, R1539, R1540, R1541, R1542, R1543, R1544, R1545, R1546, R1547, R1548, R1549, R1550, R1551, R1552, R1553, R1554, R1555, R1556, R1557, R1558, R1559, R1560, R1561, R1562, R1563, R1564, R1565, R1566, R1567, R1568, R1569, R1570, R1571, R1572, R1573, R1574, R1575, R1576, R1577, R1578, R1579, R1580, R1581, R1582, R1583, R1584, R1585, R1586, R1587, R1588, R1589, R1590, R1591, R1592, R1593, R1594, R1595, R1596, R1597, R1598, R1599, R1600, R1601, R1602, R1603, R1604, R1605, R1606, R1607, R1608, R1609, R1610, R1611, R1612, R1613, R1614, R1615, R1616, R1617, R1618, R1619, R1620, R1621, R1622, R1623, R1624, R1625, R1626, R1627, R1628, R1629, R1630, R1631, R1632, R1633, R1634, R1635, R1636, R1637, R1638, R1639, R1640, R1641, R1642, R1643, R1644, R1645, R1646, R1647, R1648, R1649, R1650, R1651, R1652, R1653, R1654, R1655, R1656, R1657, R1658, R1659, R1660, R1661, R1662, R1663, R1664, R1665, R1666, R1667, R1668, R1669, R1670, R1671, R1672, R1673, R1674, R1675, R1676, R1677, R1678, R1679, R1680, R1681, R1682, R1683, R1684, R1685, R1686, R1687, R1688, R1689, R1690, R1691, R1692, R1693, R1694, R1695, R1696, R1697, R1698, R1699, R1700, R1701, R1702, R1703, R1704, R1705, R1706, R1707, R1708, R1709, R1710, R1711, R1712, R1713, R1714, R1715, R1716, R1717, R1718, R1719, R1720, R1721, R1722, R1723, R1724, R1725, R1726, R1727, R1728, R1729, R1730, R1731, R1732, R1733, R1734, R1735, R1736, R1737, R1738, R1739, R1740, R1741, R1742, R1743, R1744, R1745, R1746, R1747, R1748, R1749, R1750, R1751, R1752, R1753, R1754, R1755, R1756, R1757, R1758, R1759, R1760, R1761, R1762, R1763, R1764, R1765, R1766, R1767, R1768, R1769, R1770, R1771, R1772, R1773, R1774, R1775, R1776, R1777, R1778, R1779, R1780, R1781, R1782, R1783, R1784, R1785, R1786, R1787, R1788, R1789, R1790, R1791, R1792, R1793, R1794, R1795, R1796, R1797, R1798, R1799, R1800, R1801, R1802, R1803, R1804, R1805, R1806, R1807, R1808, R1809, R1810, R1811, R1812, R1813, R1814, R1815, R1816, R1817, R1818, R1819, R1820, R1821, R1822, R1823, R1824, R1825, R1826, R1827, R1828, R1829, R1830, R1831, R1832, R1833, R1834, R1835, R1836, R1837, R1838, R1839, R1840, R1841, R1842, R1843, R1844, R1845, R1846, R1847, R1848, R1849, R1850, R1851, R1852, R1853, R1854, R1855, R1856, R1857, R1858, R1859, R1860, R1861, R1862, R1863, R1864, R1865, R1866, R1867, R1868, R1869, R1870, R1871, R1872, R1873, R1874, R1875, R1876, R1877, R1878, R1879, R1880, R1881, R1882, R1883, R1884, R1885, R1886, R1887, R1888, R1889, R1890, R1891, R1892, R1893, R1894, R1895, R1896, R1897, R1898, R1899, R1900, R1901, R1902, R1903, R1904, R1905, R1906, R1907, R1908, R1909, R1910, R1911, R1912, R1913, R1914, R1915, R1916, R1917, R1918, R1919, R1920, R1921, R1922, R1923, R1924, R1925, R1926, R1927, R1928, R1929, R1930, R1931, R1932, R1933, R1934, R1935, R1936, R1937, R1938, R1939, R1940, R1941, R1942, R1943, R1944, R1945, R1946, R1947, R1948, R1949, R1950, R1951, R1952, R1953, R1954, R1955, R1956, R1957, R1958, R1959, R1960, R1961, R1962, R1963, R1964, R1965, R1966, R1967, R1968, R1969, R1970, R1971, R1972, R1973, R1974, R1975, R1976, R1977, R1978, R1979, R1980, R1981, R1982, R1983, R1984, R1985, R1986, R1987, R1988, R1989, R1990, R1991, R1992, R1993, R1994, R1995, R1996, R1997, R1998, R1999, R2000, R2001, R2002, R2003, R2004, R2005, R2006, R2007, R2008, R2009, R2010, R2011, R2012, R2013, R2014, R2015, R2016, R2017, R2018, R2019, R2020, R2021, R2022, R2023, R2024, R2025, R2026, R2027, R2028, R2029, R2030, R2031, R2032, R2033, R2034, R2035, R2036, R2037, R2038, R2039, R2040, R2041, R2042, R2043, R2044, R2045, R2046, R2047, R2048, R2049, R2050, R2051, R2052, R2053, R2054, R2055, R2056, R2057, R2058, R2059, R2060, R2061, R2062, R2063, R2064, R2065, R2066, R2067, R2068, R2069, R2070, R2071, R2072, R2073, R2074, R2075, R2076, R2077, R2078, R2079, R2080, R2081, R2082, R2083, R2084, R2085, R2086, R2087, R2088, R2089, R2090, R2091, R2092, R2093, R2094, R2095, R2096, R2097, R

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
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— G BOARD —



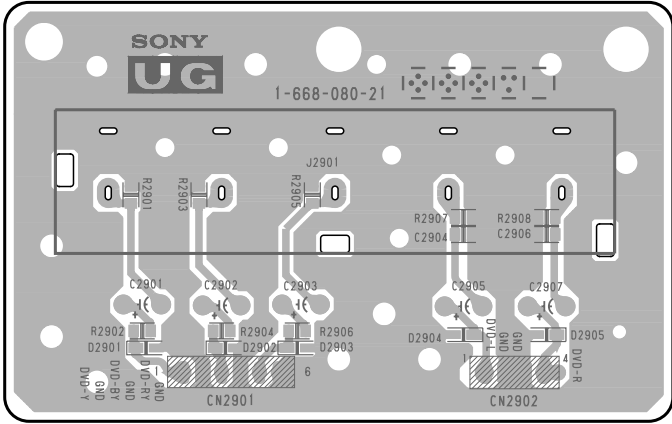
**G BOARD**  
Terminal name of semiconductors  
in silk screen printed circuit (\*)

Ref.	*
Q6001-Q6006, Q6010-Q6012, Q6016-Q6018	①

※: Refer to Terminal name of  
semiconductors in silk screen  
printed circuit (see page 59)



— UG BOARD —



**UG BOARD**  
Terminal name of semiconductors  
in silk screen printed circuit (\*)

Ref.	*
D2901-D2905	③

※: Refer to Terminal name of  
semiconductors in silk screen  
printed circuit (see page 59)

6-5. SEMICONDUCTORS

**BA7606F-T2**  
**CXA1315M**  
**CXA1875AM-T4**  
**HEF4053BT**

16pin SOP

**CA0007AD**  
**IR2112**  
**NJM2058D**  
**μPC339C**

14pin DIP

**CA0007AM**

14pin SOP

**CXA1855Q**  
**MC141627FT**

48pin QFP

**CXA2050S**

64pin DIP

**CXP85452**

TOP VIEW

**CXP86213-002S**  
**SAA5261**

52pin DIP

**MC14052BF**

5pin Chip

**PST593C-MMP-4P**

4pin Chip

**STV9379**

7pin Chip

**MSP3410D-PS-B4-T-ND**

68pin QFJ

**NJM79M05FA**

32pin SOP

**PA0053B**

18pin DIP

**PM0011AS**

42pin DIP

**PQ05RF11**

1234

**IR3M02**  
**IR3M02A**

16pin DIP

**LM2940CT-5.0**  
**L7812CV**  
**NJM78M05FA**  
**PQ09RF2**  
**TA7812S**  
**μPC2405HF**

14pin DIP

**LM358D**  
**LM358DR**  
**NJM4558M-T2**  
**NJM4558M-TE2**  
**ST24C08FM6TR**  
**TL082CPS-E05**  
**TL082M**  
**μPC4558G2**

8pin SOP

**LM393P**  
**NJM4560D**  
**RC4560D**  
**TDA2822M**  
**TDA7264**  
**TOP209P**  
**μPC393C**

8pin DIP

**PST9143NL**

5pin Chip

**SDA9187-2XGEG**

28pin SOP

**SDA9189XGEG**  
**SDA9189XGEGA132**

32pin SOP

**SE135N-LF12**  
**SE-135N**

18pin SIP

**STK392-150**

MARKING SIDE VIEW

**TDA8395T/N3**

20pin SOP

**TDA8424**

20pin DIP

**TDA9160A**  
**XR1071CP**

32pin DIP

**DTA144EKA-T146**  
**DTC114EK**  
**DTC114EKA-T146**  
**DTC124EK**  
**DTC124EKA-T146**  
**DTC143TKA-T146**  
**DTC144EKA**  
**DTC144EKA-T146**  
**2SA1037AK-T146-QR**  
**2SA1037AK-T146-R**  
**2SA1037K-T-146-QR**  
**2SA1162G**  
**2SC1623-L5L6**  
**2SC2412K-T-146-QR**  
**2SC2712-YG**  
**2SC2712-YG-TE85L**

18pin SIP

**DTC144ESA**  
**DIC144ESA-TP**  
**2SA1175-HFE**  
**2SA1309A-QRSTA**  
**2SC2785-HFE**  
**2SC3311A-QRSTA**

LETTER SIDE

**2SC2611**  
**2SC2688-LK**

LETTER SIDE

**D4SBS4**  
**D4SBS4-F**  
**D6SB60L**  
**RBA-406B**

**MTZJ-T-77-12B**  
**MTZJ-T-77-13**  
**MTZJ-T-77-13B**  
**MTZJ-T-77-20C**  
**MTZJ-T-77-33**  
**MTZJ-T-77-3.6**  
**MTZJ-T-77-39**  
**MTZJ-T-77-5.1**  
**MTZJ-T-77-5.1B**  
**MTZJ-T-77-5.6**  
**MTZJ-T-77-5.6B**  
**MTZJ-T-77-7.5B**  
**MTZJ-T-77-7.5C**  
**MTZJ-T-77-9.1B**  
**MTZJ-13**  
**MTZJ-13B**  
**MTZJ-33B**  
**MTZJ-7.5B**  
**RD12ES-B2**  
**RD20ES-B2**  
**RD3.0ESB2**  
**RD3.0ES-T1B2**  
**RD3.6ES-B1**  
**RD39ES-B2**  
**RD5.1ES-B1**  
**RD5.1ES-B2**  
**RD5.6ESB2**  
**RD7.5ESB2**

**EL1Z**  
**EL1Z-V1**  
**GP08D**  
**GP08DPKG23**  
**MTZJ-T-77-9.1A**  
**RGP02-17EL-6433**  
**RGP02-17PKG23**  
**RGP02-20EL-6394**  
**RGP10GPKG23**  
**S2L40F**  
**UF4005PKG23**

**2SC4632LS-CB7**  
**2SD2539 (LBSONY-1)**

**2SK2251-01-F19**

**2SA1091-O**  
**2SA1091-TPE2**

**DAP202K**

**D1NL20-TR**  
**D2S4M**

**D10SC6M-4012**

**2SA1524**  
**2SA1524-TP**

**2SB734-34**

**ERC04-06S**  
**ERC06-15S**  
**1SS133T-72**  
**1SS133T-77**

**P6KE200AG23**

**SLA-580LT3F**

**ERD29-08J**

**MA3240-TX**

**UDZ-TE-17-3.9B**  
**UDZ-TE-17-4.7B**  
**UDZ-TE-17-9.1B**  
**1SS355**  
**1SS355TE-17**

**ANODE**  
**CATHODE**

SECTION 7  
EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.

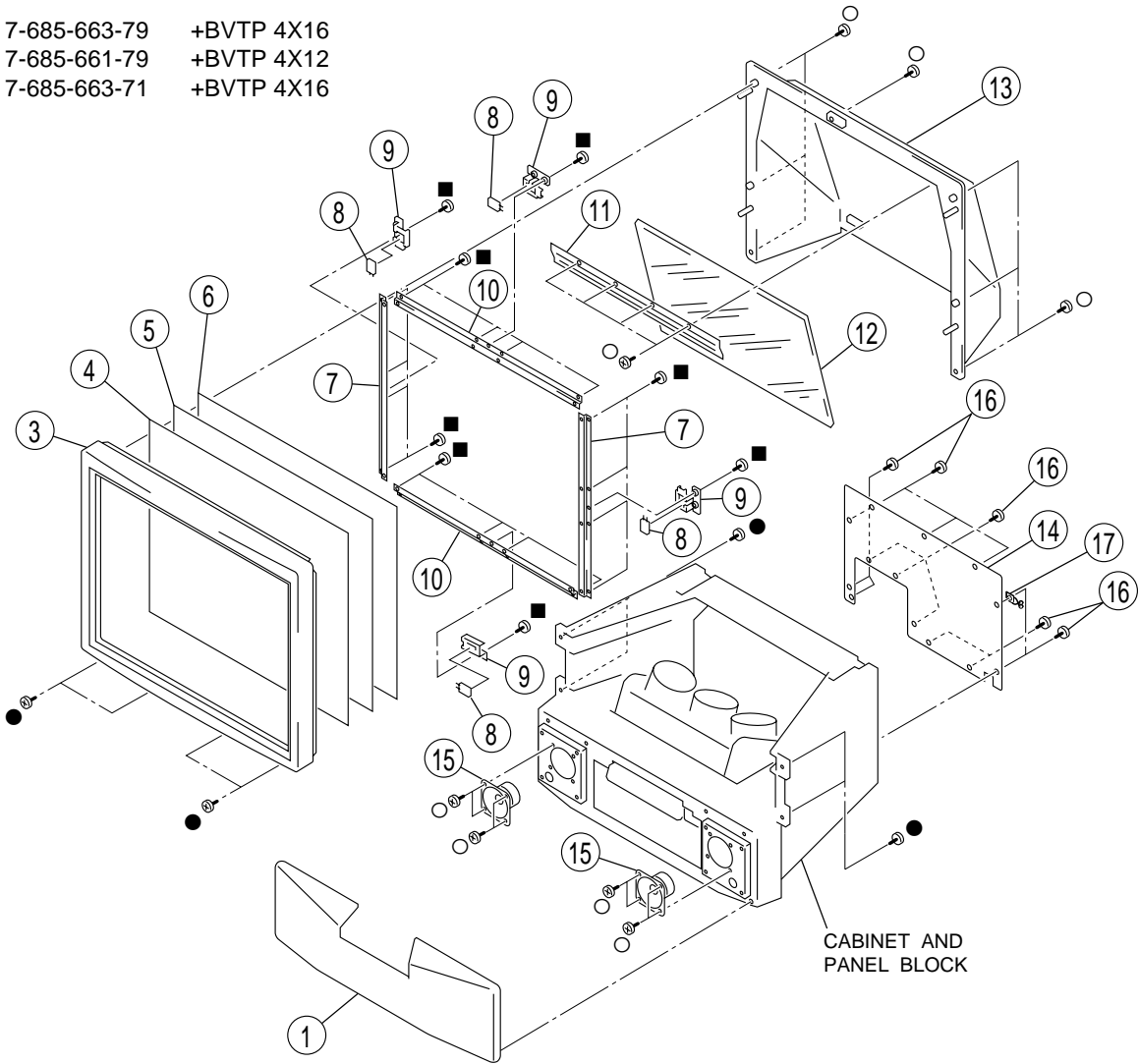
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

7-1. SCREEN AND COVER BLOCK (KP-EF41)

- : 7-685-663-79 +BVTP 4X16  
■ : 7-685-661-79 +BVTP 4X12  
● : 7-685-663-71 +BVTP 4X16



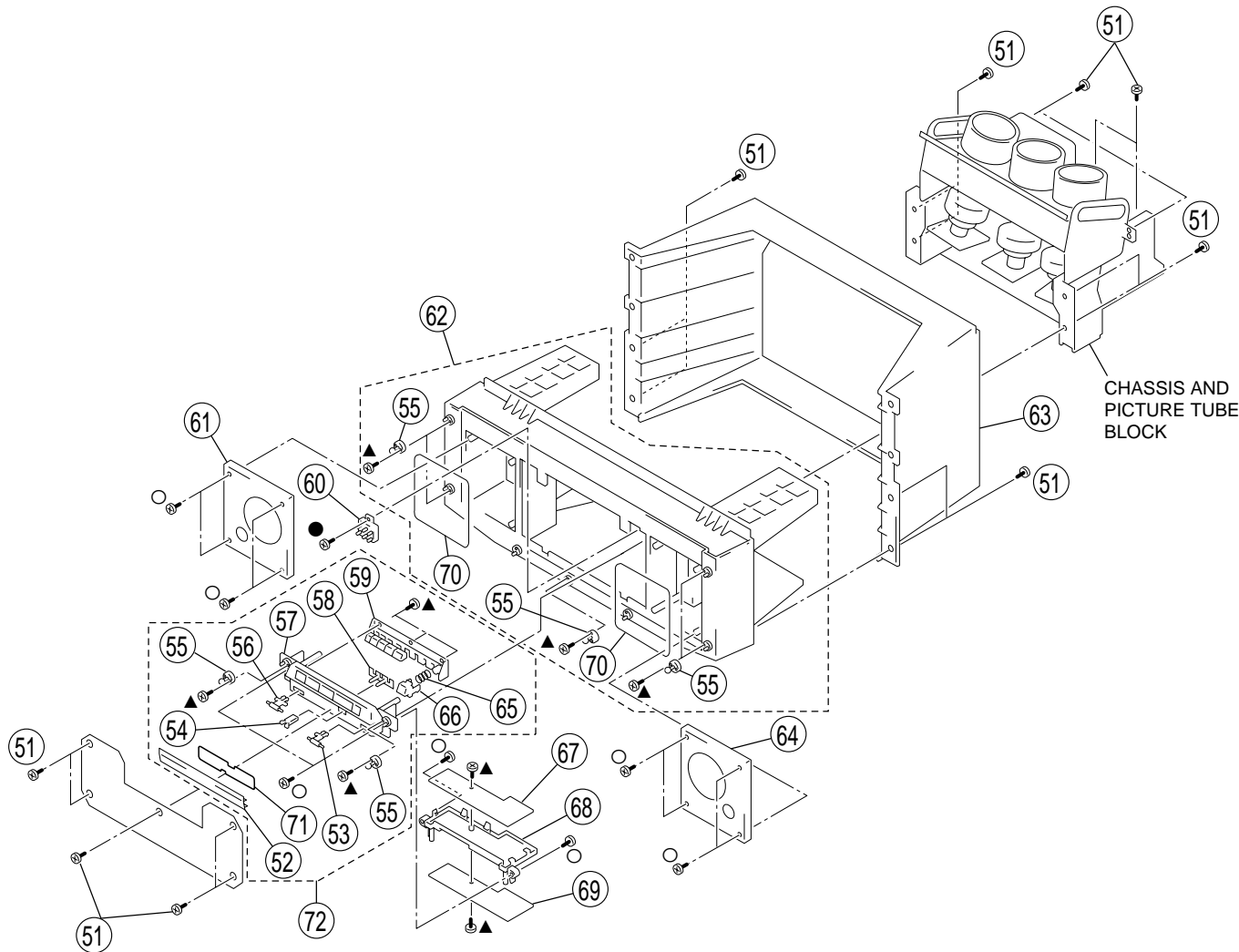
REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-4038-375-1	GRILLE ASSY (41), SPEAKER		11	* 4-066-129-01	HOLDER, MIRROR	
3	X-4038-379-1	BEZNET ASSY		12	4-066-117-01	MIRROR (41)	
4	4-063-365-11	SCREEN, CONTRAST		13	* 4-066-151-11	COVER, MIRROR	
5	4-070-236-11	PLATE (L), DIFFUSION		14	* 4-066-148-01	BOARD (41), REAR	
6	4-070-358-11	PLATE (F), DIFFUSION		15	1-505-426-21	SPEAKER (10.6CM)	
7	* 4-066-126-01	HOLDER (V), SCREEN		16	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD	
8	1-528-864-11	BATTERY, SOLAR		17	3-703-319-01	PURSE LOCK (DIA.15)	
9	* 4-066-132-01	HOLDER, SENSOR					
10	* 4-066-125-01	HOLDER (H), SCREEN					



7-2. CABINET AND PANEL BLOCK (KP-EF41)

- : 7-685-663-79 +BVTP 4X16  
● : 7-685-663-71 +BVTP 4X16  
▲ : 7-685-648-79 +BVTP 3X12

The components identified by shading and mark ▲ are critical for safety.  
Replace only with part number specified.

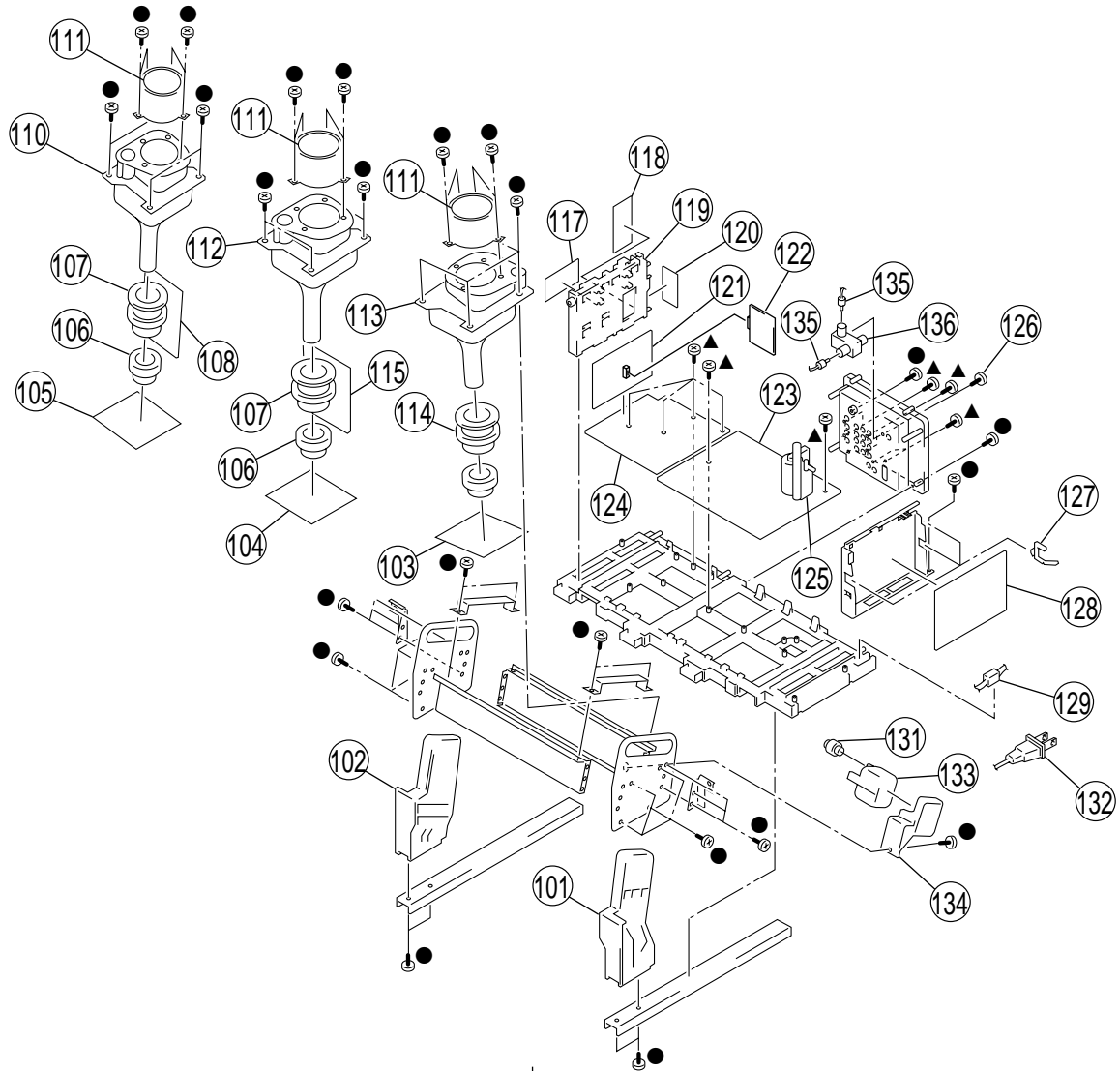


REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD		63	X-4038-377-1	CABINET ASSY, REAR	
52	4-066-140-31	DOOR		64	* 4-066-146-01	BOARD (R), BAFFLE	
53	4-045-250-21	DAMPER		65	4-066-103-01	SPRING, COMPRESSION	
54	4-047-464-01	CATCHER, PUSH		66	4-066-131-21	BUTTON, POWER	
55	4-843-806-00	STRIKE		67	* A-1372-518-A	H1 BOARD, MOUNT	
56	3-703-035-11	SHAFT, LID		68	* 4-066-133-02	BRACKET (H)	
57	4-066-136-21	PANEL, CONTROL		69	* A-1375-177-A	H2 BOARD, COMPLETE	
58	4-066-130-01	GUIDE, LIGHT		70	* 4-066-106-01	SPACER (SP)	
59	4-066-141-21	BUTTON, MULTI		71	4-006-112-21	LABEL, CONTROL	
60	▲ 1-223-925-11	RESISTOR ASSY (FCOUS PACK)		72	X-4038-376-1	PANEL ASSY, CONTROL	52-59,65,66,71
61	* 4-066-145-01	BOARD (L), BAFFLE					
62	X-4038-378-1	CABINET ASSY, FRONT	55,70				

### 7-3. CHASSIS AND PICTURE TUBE BLOCK (KP-EF41)

- : 7-685-663-71 +BVTP 4X16  
▲ : 7-685-648-79 +BVTP 3X12

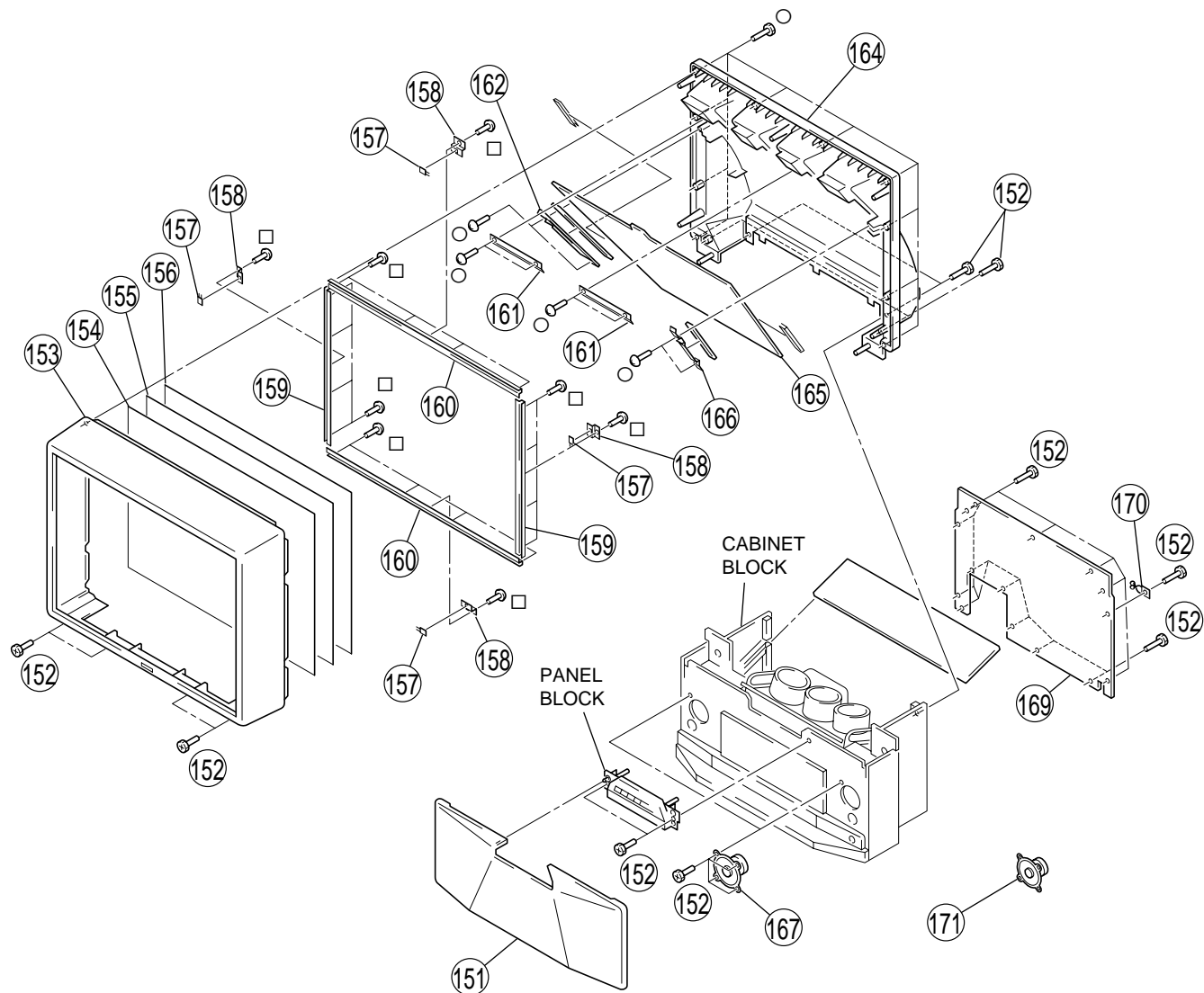
The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
101	* 4-066-135-01	STAY (R), SIDE		121	* A-1299-364-A	AG BOARD, COMPLETE (EF41MN3,SN3)	
102	* 4-066-134-01	STAY (L), SIDE			* A-1299-365-A	AG BOARD, COMPLETE (EF41ME3)	
103	* A-1332-127-A	CB BOARD, MOUNT		122	* A-1390-891-A	S BOARD, MOUNT	
104	* A-1332-126-A	CG BOARD, MOUNT		123	* A-1346-764-A	E BOARD, COMPL	
105	* A-1332-125-A	CR BOARD, MOUNT		124	* A-1346-763-A	D BOARD, COMPL	
106	▲ 1-452-790-11	NECK ASSY		125	▲ 1-453-331-21	FBT ASSY NX-4012/M3T4	
107	▲ 1-451-454-41	DEFLECTION YOKE (G)(R)		126	4-382-854-11	SCREW (M3X10), P, SW (+)	
108	* A-1391-078-A	ZR BOARD, BOARD, MOUNT		127	* 4-316-015-00	HOLDER, WIRE	
110	▲ A-1501-775-A	MECHASEAL ASSY(R), SLIM		128	* A-1316-394-A	G BOARD, COMPL	
111	4-056-258-11	LENS (DELTA 78)		129	4-022-115-00	HOLDER, AC CORD	
112	▲ A-1501-776-A	MECHASEAL ASSY(G), SLIM		131	4-373-137-01	CAP (Z), RUBBER	
113	▲ A-1501-777-A	MECHASEAL ASSY(B), SLIM		132	▲ 1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V (EF41MN3,ME3)	
114	▲ 1-451-454-61	DEFLECTION YOKE (B)			▲ 1-574-358-51	CORD, POWER (WITH CONNECTOR) (EF41SN3)	
115	* A-1391-079-A	ZG BOARD, MOUNT		133	▲ 8-598-955-13	BLOCK ASSY, HV HVB-1030	
117	* A-1342-428-A	V2 BOARD, MOUNT		134	* 4-066-144-02	HOLDER, HVR	
118	* A-1190-325-A	P1 BOARD, MOUNT		135	* 1-555-400-00	CABLE, PIN	
119	* 4-066-142-02	TERMINAL BOARD		136	1-251-372-21	BOOSTER, RF	
120	* A-1373-691-A	UG BOARD, MOUNT					

7-4. SCREEN AND COVER BLOCK (KP-EF48)

- : 7-685-663-79 +BVTP 4X16  
□ : 7-685-661-14 +BVTP 4X12



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
151	X-4038-382-1	GRILLE ASSY, SPEAKER		161	4-075-234-01	HOLDER (TOP), MIRROR	
152	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD		162	* 4-076-705-01	HOLDER (SL), MIRROR	
153	X-4037-794-1	BEZEL (48) ASSY		164	* 4-076-707-11	COVER (48), MIRROR	
154	4-064-041-01	SCREEN (48), CONTRAST		165	4-069-918-01	MIRROR (48)	
155	4-075-440-01	PLATE (48L), DIFFUSION		166	* 4-076-706-01	HOLDER (SR), MIRROR	
156	4-058-455-11	PLATE (F), DIFFUSION		167	1-529-643-11	SPEAKER (13CM)	
157	1-528-864-11	BATTERY, SOLAR		169	4-079-662-01	BOARD (48), REAR	
158	* 4-066-132-01	HOLDER, SENSOR		170	3-703-319-01	PURSE LOCK (DIA.15)	
159	* 4-064-051-01	HOLDER (V48), SCREEN		171	1-529-403-11	SPEAKER (6.6CM)	
160	* 4-064-052-01	HOLDER (H), SCREEN					

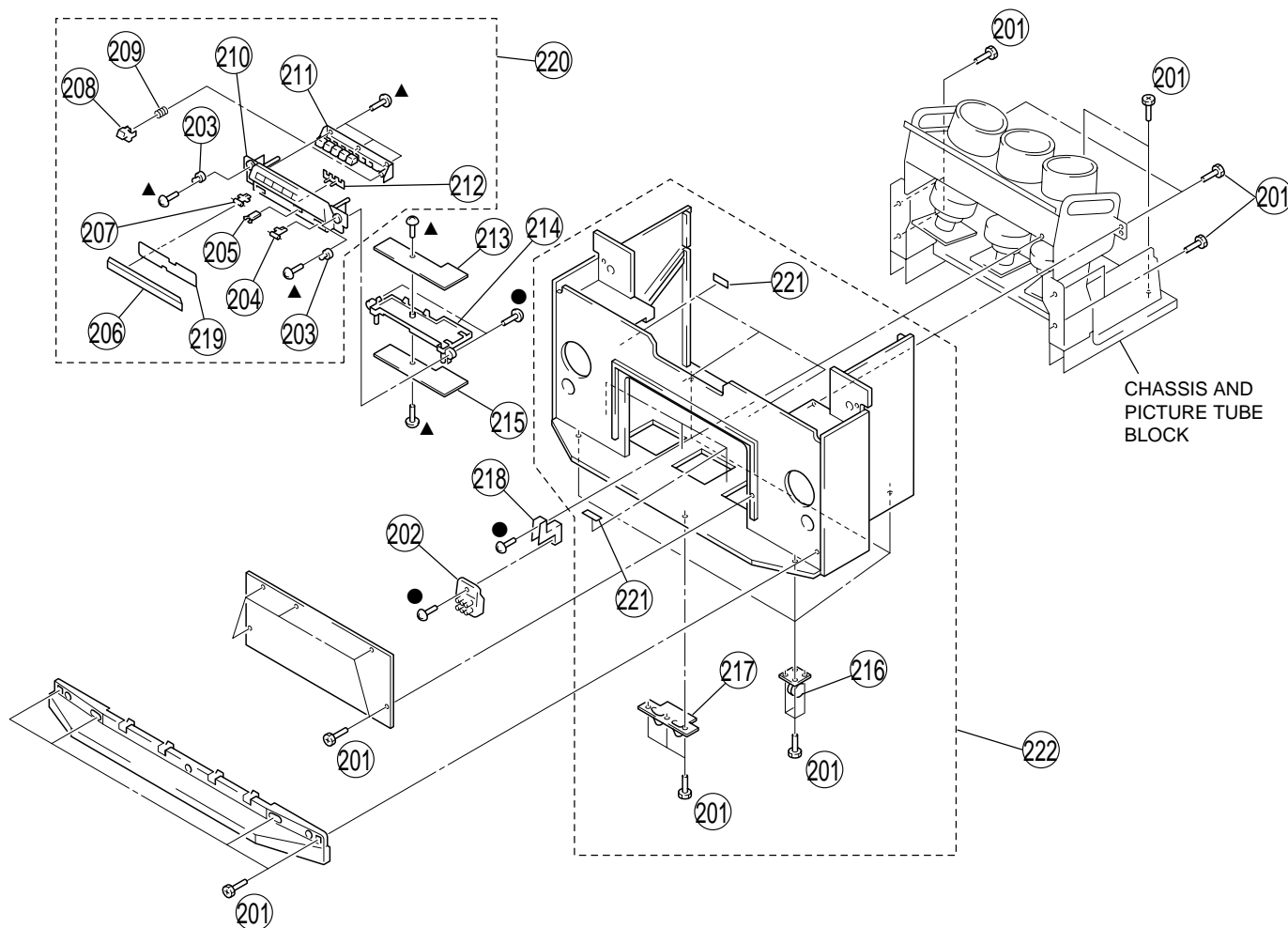


## 7-5. CABINET AND PANEL BLOCK (KP-EF48)

● : 7-685-663-71 +BVTP 4X16

▲ : 7-685-648-79 +BVTP 3X12

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

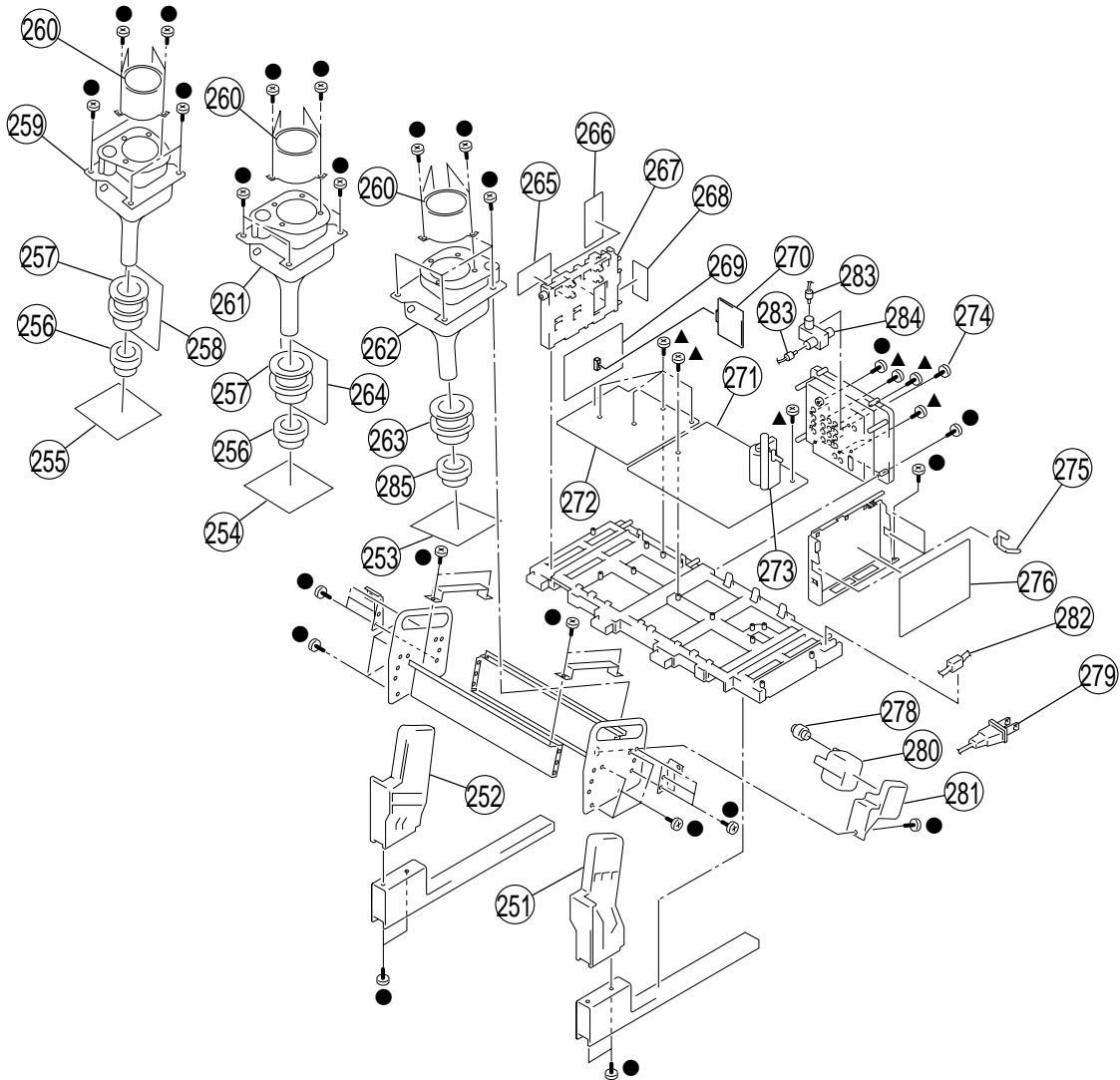


REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
201	4-378-522-31	SCREW, TAPPING, HEXAGON HEAD		211	4-066-141-01	BUTTON, MULTI	
202	▲ 1-223-925-11	RESISTOR ASSY (FCOUS PACK)		212	4-066-130-01	GUIDE, LIGHT	
203	4-843-806-00	STRIKE		213	* A-1372-518-A	H1 MOUNT	
204	4-045-250-21	DAMPER		214	* 4-066-133-01	BRACKET (H)	
205	4-047-464-01	CATCHER, PUSH		215	* A-1375-177-A	H2 COMPL	
206	4-066-140-01	DOOR		216	4-075-244-01	CASTER (30 DIA.)	
207	3-703-035-11	SHAFT, LID		217	4-075-874-01	FOOT, PLASTIC	
208	4-066-131-01	BUTTON, POWER		218	* 4-054-825-01	BRACKET, FOCUS PACK	
209	4-066-103-01	SPRING, COMPRESSION		219	4-066-112-21	LABEL, CONTROL	
210	4-066-136-21	PANEL, CONTROL		220	X-4038-376-1	PANEL ASSY, CONTROL	203-212,219
				221	4-069-915-01	CLAMP	
				222	* X-4038-380-1	CABINET (48) ASSY	201,216,217,221

## 7-6. CHASSIS AND PICTURE TUBE BLOCK (KP-EF48)

- : 7-685-663-71 +BVTP 4X16  
▲ : 7-685-648-79 +BVTP 3X12

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
251	* 4-066-135-01	STAY (R), SIDE		268	* A-1373-691-A	UG BOARD, MOUNT	
252	* 4-066-134-01	STAY (L), SIDE		269	* A-1299-364-A	AG BOARD, COMPL	
253	* A-1332-127-A	CB BOARD, MOUNT		270	* A-1390-891-A	S BOARD, MOUNT	
254	* A-1332-126-A	CG BOARD, MOUNT		271	* A-1348-007-A	E BOARD, COMPLETE	
255	* A-1332-125-A	CR BOARD, MOUNT		272	* A-1348-005-A	D BOARD, COMPLETE	
256	▲ 1-452-790-11	NECK ASSY		273	▲ 1-453-331-21	FBT ASSY NX-4012/M3T4	
257	▲ 1-451-454-41	DEFLECTION YOKE (G)(R)		274	4-382-854-11	SCREW (M3X10), P, SW (+)	
258	* A-1391-078-A	ZR BOARD, MOUNT		275	* 4-316-015-00	HOLDER, WIRE	
259	▲ 8-733-572-15	CRT 07MXC3 (R) (HEATER)		276	* A-1316-394-A	G COMPL	
260	4-056-258-21	LENS (DELTA 78)		278	4-373-137-01	CAP (Z), RUBBER	
261	▲ 8-733-570-15	CRT 07MXC2 (G) (HEATER)		279	▲ 1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V (EF48MN3,ME3)	
262	▲ 8-733-575-15	CRT 07MAC3 (B) (HEATER)			▲ 1-574-358-51	CORD, POWER (WITH CONNECTOR) (EF48SN3)	
263	▲ 1-451-454-61	DEFLECTION YOKE (B)		280	▲ 8-598-955-13	BLOCK ASSY, HV HVB-1030	
264	* A-1391-079-A	ZG BOARD, MOUNT		281	* 4-066-144-02	HOLDER, HVR	
265	* A-1342-428-A	V2 BOARD, MOUNT		282	4-022-115-00	HOLDER, AC CORD	
266	* A-1190-325-A	P1 BOARD, MOUNT		283	* 1-555-400-00	CABLE, PIN	
267	* 4-066-142-02	TERMINAL BOARD		284	1-251-372-21	BOOSTER, RF	
				285	▲ 1-452-909-31	MAGNET ASSY, 4 POLE	

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## SECTION 8

### ELECTRICAL PARTS LIST

#### NOTE:

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

• The components identified by  $\Delta$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

#### RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

#### CAPACITORS

PF :  $\mu$ F

• There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
* A-1190-325-A P1 BOARD, MOUNT *****				C2444	1-163-038-00	CERAMIC CHIP 0.1MF	25V
<CAPACITOR>				C2445	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2301	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2446	1-164-346-11	CERAMIC CHIP 1MF	16V
C2302	1-104-664-11	ELECT 47MF	20%	C2447	1-126-933-11	ELECT 100MF	20% 16V
C2303	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2448	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C2304	1-104-664-11	ELECT 47MF	20%	C2449	1-104-665-11	ELECT 100MF	20% 10V
C2305	1-164-232-11	CERAMIC CHIP 0.01MF	10%	C2450	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2306	1-164-232-11	CERAMIC CHIP 0.01MF	10%	C2451	1-104-664-11	ELECT 47MF	20% 25V
C2307	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2452	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2308	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2453	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2309	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2454	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C2310	1-104-664-11	ELECT 47MF	20%	C2455	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2311	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2456	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2312	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C2457	1-104-665-11	ELECT 100MF	20% 10V
C2313	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2458	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C2402	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2459	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C2403	1-104-664-11	ELECT 47MF	20%	C2460	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2405	1-164-346-11	CERAMIC CHIP 1MF	16V	C2461	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C2406	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2463	1-163-237-11	CERAMIC CHIP 27PF	5% 50V
C2407	1-126-964-11	ELECT 10MF	20%	C2464	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C2413	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C2465	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2415	1-164-232-11	CERAMIC CHIP 0.01MF	10%	C2466	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
C2416	1-163-001-11	CERAMIC CHIP 220PF	10%	C2467	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2417	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2468	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2418	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2469	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2419	1-104-665-11	ELECT 100MF	20%	C2470	1-104-665-11	ELECT 100MF	20% 10V
C2420	1-164-004-11	CERAMIC CHIP 0.1MF	10%	C2471	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C2421	1-164-343-11	CERAMIC CHIP 0.056MF	10%	C2472	1-164-346-11	CERAMIC CHIP 1MF	16V
C2423	1-164-346-11	CERAMIC CHIP 1MF	16V	C2473	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2424	1-163-275-11	CERAMIC CHIP 1000PF	5%	C2474	1-104-664-11	ELECT 47MF	20%
C2425	1-104-664-11	ELECT 47MF	20%	C2476	1-163-251-11	CERAMIC CHIP 100PF	5%
C2426	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2478	1-163-121-00	CERAMIC CHIP 150PF	5%
C2427	1-163-251-11	CERAMIC CHIP 100PF	5%	C2480	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2428	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2481	1-104-664-11	ELECT 47MF	20%
C2429	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	C2482	1-104-665-11	ELECT 100MF	20%
C2430	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2483	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2431	1-164-346-11	CERAMIC CHIP 1MF	16V	C2484	1-164-346-11	CERAMIC CHIP 1MF	16V
C2432	1-164-346-11	CERAMIC CHIP 1MF	16V	C2485	1-164-346-11	CERAMIC CHIP 1MF	16V
C2433	1-164-346-11	CERAMIC CHIP 1MF	16V	C2486	1-164-346-11	CERAMIC CHIP 1MF	16V
C2434	1-163-251-11	CERAMIC CHIP 100PF	5%	C2801	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2435	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2802	1-104-664-11	ELECT 47MF	20%
C2436	1-164-346-11	CERAMIC CHIP 1MF	16V	C2803	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2437	1-163-249-11	CERAMIC CHIP 82PF	5%	C2804	1-104-664-11	ELECT 47MF	20%
C2438	1-115-339-11	CERAMIC CHIP 0.1MF	10%	C2805	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2439	1-164-346-11	CERAMIC CHIP 1MF	16V	C2806	1-126-967-11	ELECT 47MF	20%
C2440	1-164-346-11	CERAMIC CHIP 1MF	16V	C2807	1-163-251-11	CERAMIC CHIP 100PF	5%
C2442	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2808	1-163-243-11	CERAMIC CHIP 47PF	5%
C2443	1-104-665-11	ELECT 100MF	20%	C2809	1-163-251-11	CERAMIC CHIP 100PF	5%
				C2810	1-163-243-11	CERAMIC CHIP 47PF	5%
				C2811	1-164-346-11	CERAMIC CHIP 1MF	16V
				C2812	1-164-346-11	CERAMIC CHIP 1MF	16V

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C2813	1-126-964-11	ELECT 10MF 20% 50V		Q2412	1-801-806-11	TRANSISTOR DTC144EKA-T146	
				Q2413	8-729-901-00	TRANSISTOR DTC124EK	
		<CONNECTOR>		Q2414	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
CN2301	* 1-564-515-11	PLUG, CONNECTOR 12P		Q2415	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
CN2401	* 1-564-508-11	PLUG, CONNECTOR 5P		Q2416	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
CN2402	* 1-564-596-11	PLUG, CONNECTOR 15P		Q2417	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
CN2801	* 1-564-509-11	PLUG, CONNECTOR 6P		Q2418	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
				Q2419	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
		<DIODE>		Q2420	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
D2401	8-719-047-16	DIODE BAS216		Q2421	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q2422	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<FERRITE BEAD>		Q2423	8-729-900-53	TRANSISTOR DTC114EK	
FB2401	1-414-235-11	INDUCTOR CHIP 0UH		Q2424	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FB2402	1-414-235-11	INDUCTOR CHIP 0UH		Q2426	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q2427	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
		<FILTER>		Q2428	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
FL2301	1-236-071-11	ENCAPSULATED COMPONENT		Q2429	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
FL2302	1-236-071-11	ENCAPSULATED COMPONENT		Q2430	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
FL2303	1-236-071-11	ENCAPSULATED COMPONENT		Q2431	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
				Q2432	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
		<IC>		Q2801	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2401	8-759-439-64	IC HEF4053BT		Q2802	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2402	8-759-565-20	IC TDA4665T/V5-118		Q2803	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2403	8-759-248-15	IC SDA9187-3XGEG		Q2804	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2404	8-759-468-94	IC SDA9189XGEGA132		Q2805	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
IC2405	8-759-183-35	IC TDA9160A		Q2806	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2406	8-759-278-95	IC BA7606F		Q2807	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2801	8-752-072-94	IC CXA1875AM-T4		Q2808	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2802	8-759-439-64	IC HEF4053BT		Q2809	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2803	8-759-439-64	IC HEF4053BT		Q2810	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
						<RESISTOR>	
		<COIL>		R2301	1-216-025-00	RES,CHIP 100 5% 1/10W	
L2301	1-408-603-31	INDUCTOR 10UH		R2302	1-216-025-00	RES,CHIP 100 5% 1/10W	
L2401	1-408-603-31	INDUCTOR 10UH		R2303	1-216-049-00	RES,CHIP 1K 5% 1/10W	
L2402	1-408-603-31	INDUCTOR 10UH		R2305	1-216-025-00	RES,CHIP 100 5% 1/10W	
L2403	1-408-603-31	INDUCTOR 10UH		R2306	1-216-049-00	RES,CHIP 1K 5% 1/10W	
L2404	1-408-603-31	INDUCTOR 10UH		R2307	1-216-049-00	RES,CHIP 1K 5% 1/10W	
L2405	1-408-603-31	INDUCTOR 10UH		R2308	1-216-049-00	RES,CHIP 1K 5% 1/10W	
L2406	1-408-603-31	INDUCTOR 10UH		R2402	1-216-073-00	RES,CHIP 10K 5% 1/10W	
L2407	1-410-384-31	INDUCTOR CHIP 18UH		R2403	1-216-105-00	RES,CHIP 220K 5% 1/10W	
L2408	1-408-603-31	INDUCTOR 10UH		R2404	1-216-049-00	RES,CHIP 1K 5% 1/10W	
L2409	1-410-210-21	INDUCTOR CHIP 33UH		R2405	1-216-059-00	RES,CHIP 2.7K 5% 1/10W	
L2410	1-408-603-31	INDUCTOR 10UH		R2406	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
L2801	1-414-194-11	INDUCTOR 33UH		R2407	1-216-039-00	RES,CHIP 390 5% 1/10W	
L2802	1-412-010-41	INDUCTOR CHIP 22UH		R2408	1-216-049-00	RES,CHIP 1K 5% 1/10W	
L2803	1-414-194-11	INDUCTOR 33UH		R2409	1-216-033-00	RES,CHIP 220 5% 1/10W	
L2804	1-412-010-41	INDUCTOR CHIP 22UH		R2411	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
		<TRANSISTOR>		R2412	1-216-031-00	RES,CHIP 180 5% 1/10W	
Q2301	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R2413	1-216-049-00	RES,CHIP 1K 5% 1/10W	
Q2401	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R2414	1-216-033-00	RES,CHIP 220 5% 1/10W	
Q2402	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R2415	1-216-101-00	RES,CHIP 150K 5% 1/10W	
Q2403	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R2416	1-216-049-00	RES,CHIP 1K 5% 1/10W	
Q2404	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R2417	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
Q2405	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R2418	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
Q2406	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R2419	1-216-049-00	RES,CHIP 1K 5% 1/10W	
Q2407	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R2420	1-216-059-00	RES,CHIP 2.7K 5% 1/10W	
Q2408	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R2421	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
Q2409	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R2422	1-216-049-00	RES,CHIP 1K 5% 1/10W	
Q2410	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R2423	1-216-049-00	RES,CHIP 1K 5% 1/10W	
Q2411	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R2424	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
				R2425	1-216-047-91	RES,CHIP 820 5% 1/10W	
				R2426	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
				R2427	1-216-049-00	RES,CHIP 1K 5% 1/10W	
				R2428	1-216-033-00	RES,CHIP 220 5% 1/10W	
				R2430	1-216-049-00	RES,CHIP 1K 5% 1/10W	
				R2431	1-216-049-00	RES,CHIP 1K 5% 1/10W	

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R2432	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R2502	1-216-025-00	RES,CHIP	100 5% 1/10W
R2433	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R2503	1-216-025-00	RES,CHIP	100 5% 1/10W
R2434	1-216-089-00	RES,CHIP	47K 5% 1/10W	R2801	1-216-059-11	RES,CHIP	2.7K 5% 1/10W
R2435	1-216-049-00	RES,CHIP	1K 5% 1/10W	R2802	1-216-063-91	RES,CHIP	3.9K 5% 1/10W
R2436	1-216-063-91	RES,CHIP	3.9K 5% 1/10W	R2803	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R2437	1-216-067-00	RES,CHIP	5.6K 5% 1/10W	R2804	1-216-091-00	RES,CHIP	56K 5% 1/10W
R2438	1-216-025-00	RES,CHIP	100 5% 1/10W	R2805	1-216-081-00	RES,CHIP	22K 5% 1/10W
R2440	1-216-073-00	RES,CHIP	10K 5% 1/10W	R2806	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R2441	1-216-025-00	RES,CHIP	100 5% 1/10W	R2807	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R2442	1-216-295-11	SHORT	0	R2808	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R2443	1-216-097-00	RES,CHIP	100K 5% 1/10W	R2809	1-216-093-91	RES,CHIP	68K 5% 1/10W
R2444	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R2810	1-216-081-00	RES,CHIP	22K 5% 1/10W
R2445	1-216-049-00	RES,CHIP	1K 5% 1/10W	R2811	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2446	1-216-083-00	RES,CHIP	27K 5% 1/10W	R2812	1-216-045-00	RES,CHIP	680 5% 1/10W
R2447	1-216-049-00	RES,CHIP	1K 5% 1/10W	R2813	1-216-295-11	SHORT	0
R2448	1-216-047-91	RES,CHIP	820 5% 1/10W	R2814	1-216-025-00	RES,CHIP	100 5% 1/10W
R2449	1-216-045-00	RES,CHIP	680 5% 1/10W	R2815	1-216-025-00	RES,CHIP	100 5% 1/10W
R2450	1-216-083-00	RES,CHIP	27K 5% 1/10W	R2816	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
R2451	1-216-647-11	METAL CHIP	680 0.50% 1/10W	R2817	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
R2452	1-216-049-00	RES,CHIP	1K 5% 1/10W	R2818	1-216-025-00	RES,CHIP	100 5% 1/10W
R2453	1-216-073-00	RES,CHIP	10K 5% 1/10W	R2819	1-216-025-00	RES,CHIP	100 5% 1/10W
R2454	1-216-689-11	RES,CHIP	39K 5% 1/10W	R2820	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2455	1-216-047-91	RES,CHIP	820 5% 1/10W	R2821	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2456	1-216-045-00	RES,CHIP	680 5% 1/10W	R2825	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2457	1-216-649-11	METAL CHIP	820 0.50% 1/10W	R2826	1-216-047-91	RES,CHIP	820 5% 1/10W
R2458	1-216-001-00	RES,CHIP	10 5% 1/10W	R2827	* 1-216-029-00	RES,CHIP	150 5% 1/10W
R2459	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R2828	1-216-037-00	RES,CHIP	330 5% 1/10W
R2460	1-216-049-00	RES,CHIP	1K 5% 1/10W	R2830	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2461	1-216-051-00	RES,CHIP	1.2K 5% 1/10W	R2831	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2462	1-216-670-11	METAL CHIP	6.2K 0.50% 1/10W	R2832	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2463	1-216-645-11	METAL CHIP	560 0.50% 1/10W	R2833	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2464	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R2834	1-216-047-91	RES,CHIP	820 5% 1/10W
R2465	1-216-073-00	RES,CHIP	10K 5% 1/10W	R2835	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2466	1-216-025-11	RES,CHIP	100 5% 1/10W	R2836	1-216-689-11	RES,CHIP	39K 5% 1/10W
R2467	1-216-001-00	RES,CHIP	10 5% 1/10W	R2837	1-216-089-00	RES,CHIP	47K 5% 1/10W
R2468	1-216-025-11	RES,CHIP	100 5% 1/10W	R2838	1-216-295-11	SHORT	0
R2469	1-216-025-11	RES,CHIP	100 5% 1/10W	R2839	1-216-295-11	SHORT	0
R2470	1-216-097-00	RES,CHIP	100K 5% 1/10W	<TUNER>			
R2472	1-216-109-00	RES,CHIP	330K 5% 1/10W	TU2301	8-598-373-20	FSS TUNER BTF-FG431	
R2473	1-216-049-00	RES,CHIP	1K 5% 1/10W	<CRYSTAL>			
R2474	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	X2401	1-760-095-21	VIBRATOR, CRYSTAL(20.48MHz)	
R2475	1-216-039-00	RES,CHIP	390 5% 1/10W	X2402	1-567-504-11	OSCILLATOR, CRYSTAL(4.43MHz)	
R2476	1-216-295-11	SHORT	0	X2403	1-567-505-11	OSCILLATOR, CRYSTAL(3.58MHz)	
R2477	1-216-295-11	SHORT	0	*****			
R2478	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	* A-1299-364-A AG BOARD, COMPLETE			
R2479	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	(AUS/GE/NZ MODEL)			
R2480	1-216-105-00	RES,CHIP	220K 5% 1/10W	*****			
R2481	1-216-051-00	RES,CHIP	1.2K 5% 1/10W	* A-1299-365-A AG BOARD, COMPLETE (ME MODEL)			
R2483	1-216-041-00	RES,CHIP	470 5% 1/10W	*****			
R2484	1-216-081-00	RES,CHIP	22K 5% 1/10W	<CAPACITOR>			
R2485	1-216-025-00	RES,CHIP	100 5% 1/10W	C101	1-126-933-11	ELECT	100MF 20% 16V
R2486	1-216-081-00	RES,CHIP	22K 5% 1/10W	C102	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
R2487	1-216-049-00	RES,CHIP	1K 5% 1/10W	C103	1-163-133-00	CERAMIC CHIP	470PF 5% 50V
R2488	1-216-025-11	RES,CHIP	100 5% 1/10W	C104	1-104-664-11	ELECT	47MF 20% 25V
R2489	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	C105	1-104-664-11	ELECT	47MF 20% 25V
R2490	1-216-025-00	RES,CHIP	100 5% 1/10W	C106	1-163-038-00	CERAMIC CHIP	0.1MF 25V
R2491	1-216-049-00	RES,CHIP	1K 5% 1/10W	C107	1-163-038-00	CERAMIC CHIP	0.1MF 25V
R2492	1-216-025-00	RES,CHIP	100 5% 1/10W	C108	1-163-038-00	CERAMIC CHIP	0.1MF 25V
R2493	1-216-049-00	RES,CHIP	1K 5% 1/10W	C109	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
R2494	1-216-295-11	SHORT	0				
R2495	1-216-025-00	RES,CHIP	100 5% 1/10W				
R2496	1-216-057-00	RES,CHIP	2.2K 5% 1/10W				
R2497	1-216-057-00	RES,CHIP	2.2K 5% 1/10W				
R2498	1-216-057-00	RES,CHIP	2.2K 5% 1/10W				
R2499	1-216-025-00	RES,CHIP	100 5% 1/10W				
R2500	1-216-295-11	SHORT	0				
R2501	1-216-025-00	RES,CHIP	100 5% 1/10W				



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C110	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C352	1-216-295-00	SHORT 0	
C111	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C353	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C112	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C401	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C113	1-104-664-11	ELECT 47MF	20% 25V	C402	1-126-964-11	ELECT 10MF	20% 50V
C114	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C403	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C115	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C404	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C116	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C405	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C117	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C406	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C118	1-104-664-11	ELECT 47MF	20% 25V	C407	1-104-664-11	ELECT 47MF	20% 25V
C119	1-104-664-11	ELECT 47MF	20% 25V	C408	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C120	1-163-137-00	CERAMIC CHIP 680PF	5% 50V	C409	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C121	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C410	1-104-664-11	ELECT 47MF	20% 25V
C122	1-104-664-11	ELECT 47MF	20% 25V	C411	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C123	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C412	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C124	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C413	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C125	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C414	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C126	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C415	1-104-664-11	ELECT 47MF	20% 25V
C127	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C416	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C128	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C417	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V
C129	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C418	1-126-964-11	ELECT 10MF	20% 50V
C300	1-164-346-11	CERAMIC CHIP 1MF	16V	C421	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C301	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C422	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C303	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C423	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C304	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C424	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C305	1-164-505-11	CERAMIC CHIP 2.2MF	16V	C425	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C306	1-164-505-11	CERAMIC CHIP 2.2MF	16V	C426	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C307	1-164-505-11	CERAMIC CHIP 2.2MF	16V	C427	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C308	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C428	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C309	1-104-664-11	ELECT 47MF	20% 25V	C430	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C310	1-126-962-11	ELECT 3.3MF	20% 50V	C431	1-126-964-11	ELECT 10MF	20% 50V
C311	1-126-934-11	ELECT 220MF	20% 16V	C432	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C312	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C433	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C313	1-164-346-11	CERAMIC CHIP 1MF	16V	C434	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C316	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C435	1-104-664-11	ELECT 47MF	20% 25V
C317	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C436	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C318	1-164-505-11	CERAMIC CHIP 2.2MF	16V	C437	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C319	1-126-964-11	ELECT 10MF	20% 50V	C438	1-104-664-11	ELECT 47MF	20% 25V
C321	1-164-346-11	CERAMIC CHIP 1MF	16V	C439	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C323	1-126-964-11	ELECT 10MF	20% 50V	C440	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C324	1-163-035-00	CERAMIC CHIP 0.047MF	50V	C441	1-104-664-11	ELECT 47MF	20% 25V
C325	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C442	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C326	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C443	1-126-967-11	ELECT 47MF	20% 50V
C327	1-137-581-11	FILM 0.1MF	5% 100V	C1001	1-163-233-11	CERAMIC CHIP 18PF	5% 50V
C328	1-130-777-00	FILM 0.1MF	5% 63V	C1002	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C329	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C1004	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C330	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C1006	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C331	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C1008	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C332	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1009	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C333	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1010	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C334	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1011	1-163-245-11	CERAMIC CHIP 56PF	5% 50V
C335	1-104-664-11	ELECT 47MF	20% 25V	C1012	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C336	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1013	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C337	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C1014	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C338	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C1015	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C339	1-104-664-11	ELECT 47MF	20% 25V	C1016	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C340	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1017	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
C341	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C1018	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
C342	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	C1019	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C343	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V	C1020	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C344	1-163-231-11	CERAMIC CHIP 15PF	5% 50V	C1021	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C345	1-163-231-11	CERAMIC CHIP 15PF	5% 50V	C1022	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C346	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1023	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C347	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1024	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C348	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1025	1-104-664-11	ELECT 47MF	20% 25V
C349	1-104-664-11	ELECT 47MF	20% 25V	C1026	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C350	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C1028	1-163-259-91	CERAMIC CHIP 220PF	5% 50V
C351	1-126-963-11	ELECT 4.7MF	20% 50V	C1029	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
				C1030	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1031	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V	C2071	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C1032	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V	C2072	1-126-962-11	ELECT 3.3MF 20%	50V
C1033	1-163-259-91	CERAMIC CHIP 220PF 5%	50V	C2073	1-126-964-11	ELECT 10MF 20%	50V
C2001	1-164-346-11	CERAMIC CHIP 1MF	16V	C2074	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C2002	1-126-933-11	ELECT 100MF 20%	16V	C2075	1-163-131-00	CERAMIC CHIP 390PF 5%	50V
C2004	1-164-346-11	CERAMIC CHIP 1MF	16V	C2076	1-163-131-00	CERAMIC CHIP 390PF 5%	50V
C2005	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2077	1-126-964-11	ELECT 10MF 20%	50V
C2006	1-104-664-11	ELECT 47MF 20%	25V	C2078	1-126-964-11	ELECT 10MF 20%	50V
C2008	1-104-664-11	ELECT 47MF 20%	25V	C2079	1-104-664-11	ELECT 47MF 20%	25V
C2009	1-163-809-11	CERAMIC CHIP 0.047MF 10%	25V	C2080	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2010	1-163-809-11	CERAMIC CHIP 0.047MF 10%	25V	C2081	1-163-251-11	CERAMIC CHIP 100PF 5%	50V
C2011	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	C2082	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C2012	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V	C2083	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2013	1-164-505-11	CERAMIC CHIP 2.2MF	16V	C2084	1-126-965-11	ELECT 22MF 20%	50V
C2014	1-163-017-00	CERAMIC CHIP 0.0047MF 10%	50V	C2085	1-164-161-11	CERAMIC CHIP 0.0022MF 10%	50V
C2015	1-104-664-11	ELECT 47MF 20%	25V	C2086	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C2016	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C2087	1-163-007-11	CERAMIC CHIP 680PF 10%	50V
C2017	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2088	1-164-161-11	CERAMIC CHIP 0.0022MF 10%	50V
C2018	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C2089	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C2019	1-126-968-11	ELECT 100MF 20%	50V	C2090	1-163-007-11	CERAMIC CHIP 680PF 10%	50V
C2020	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C2091	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2022	1-163-031-11	CERAMIC CHIP 0.01MF	50V	C2092	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2023	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C2093	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2024	1-126-965-11	ELECT 22MF 20%	50V	C2094	1-163-009-11	CERAMIC CHIP 0.001MF 10%	50V
C2025	1-104-664-11	ELECT 47MF 20%	25V	C2095	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2026	1-164-005-11	CERAMIC CHIP 0.47MF	25V			<CONNECTOR>	
C2027	1-126-965-11	ELECT 22MF 20%	50V	CN101	* 1-564-505-11	PLUG, CONNECTOR 2P	
C2029	1-163-133-00	CERAMIC CHIP 470PF 5%	50V	CN102	1-695-915-11	TAB (CONTACT)	
C2030	1-164-346-11	CERAMIC CHIP 1MF	16V	CN103	1-695-915-11	TAB (CONTACT)	
C2031	1-163-133-00	CERAMIC CHIP 470PF 5%	50V	CN104	1-695-915-11	TAB (CONTACT)	
C2032	1-164-346-11	CERAMIC CHIP 1MF	16V	CN401	* 1-564-515-11	PLUG, CONNECTOR 12P	
C2033	1-126-965-11	ELECT 22MF 20%	50V	CN402	* 1-564-516-11	PLUG, CONNECTOR 13P	
C2035	1-163-133-00	CERAMIC CHIP 470PF 5%	50V	CN403	* 1-564-511-11	PLUG, CONNECTOR 8P	
C2036	1-164-346-11	CERAMIC CHIP 1MF	16V	CN405	* 1-564-510-11	PLUG, CONNECTOR 7P	
C2037	1-163-133-00	CERAMIC CHIP 470PF 5%	50V	CN407	* 1-564-596-11	PLUG, CONNECTOR 15P	
C2038	1-164-346-11	CERAMIC CHIP 1MF	16V	CN408	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
C2039	1-104-666-11	ELECT 220MF 20%	25V	CN1002	* 1-564-515-11	PLUG, CONNECTOR 12P	
C2040	1-164-005-11	CERAMIC CHIP 0.47MF	25V	CN2001	* 1-770-747-11	CONNECTOR, BOARD TO BOARD 12P	
C2041	1-163-133-00	CERAMIC CHIP 470PF 5%	50V	CN2004	* 1-564-507-11	PLUG, CONNECTOR 4P	
C2042	1-164-346-11	CERAMIC CHIP 1MF	16V			<DIODE>	
C2043	1-163-133-00	CERAMIC CHIP 470PF 5%	50V	D101	8-719-988-61	DIODE 1SS355TE-17	
C2044	1-164-346-11	CERAMIC CHIP 1MF	16V	D102	8-719-422-12	DIODE MA8039	
C2045	1-126-965-11	ELECT 22MF 20%	50V	D104	8-719-976-96	DIODE DTZ4.7C	
C2046	1-164-005-11	CERAMIC CHIP 0.47MF	25V	D105	8-719-977-81	DIODE DTZ33B	
C2047	1-126-935-11	ELECT 470MF 20%	16V	D301	8-719-988-61	DIODE 1SS355TE-17	
C2048	1-163-038-00	CERAMIC CHIP 0.1MF	25V	D306	8-719-988-61	DIODE 1SS355TE-17	
C2049	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	D307	8-719-988-61	DIODE 1SS355TE-17	
C2050	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	D401	8-719-047-16	DIODE BAS216	
C2051	1-163-243-11	CERAMIC CHIP 47PF 5%	50V	D402	8-719-047-16	DIODE BAS216	
C2052	1-163-087-00	CERAMIC CHIP 4PF 0.25PF	50V	D403	8-719-977-22	DIODE DTZ9.1	
C2053	1-163-087-00	CERAMIC CHIP 4PF 0.25PF	50V	D414	8-719-988-61	DIODE 1SS355TE-17	
C2054	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	D2001	8-719-977-22	DIODE DTZ9.1	
C2055	1-104-664-11	ELECT 47MF 20%	25V	D2002	8-719-977-22	DIODE DTZ9.1	
C2056	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	D2003	8-719-977-22	DIODE DTZ9.1	
C2057	1-104-664-11	ELECT 47MF 20%	25V	D2004	8-719-977-22	DIODE DTZ9.1	
C2059	1-126-964-11	ELECT 10MF 20%	50V	D2005	8-719-977-22	DIODE DTZ9.1	
C2060	1-163-038-00	CERAMIC CHIP 0.1MF	25V	D2006	8-719-977-22	DIODE DTZ9.1	
C2061	1-126-934-11	ELECT 220MF 20%	16V	D2007	8-719-977-22	DIODE DTZ9.1	
C2062	1-126-965-11	ELECT 22MF 20%	50V	D2008	8-719-977-22	DIODE DTZ9.1	
C2063	1-163-038-00	CERAMIC CHIP 0.1MF	25V	D2009	8-719-977-22	DIODE DTZ9.1	
C2064	1-163-038-00	CERAMIC CHIP 0.1MF	25V	D2010	8-719-977-22	DIODE DTZ9.1	
C2065	1-126-965-11	ELECT 22MF 20%	50V	D2011	8-719-977-22	DIODE DTZ9.1	
C2066	1-163-251-11	CERAMIC CHIP 100PF 5%	50V	D2012	8-719-977-22	DIODE DTZ9.1	
C2067	1-164-005-11	CERAMIC CHIP 0.47MF	25V	D2013	8-719-977-22	DIODE DTZ9.1	
C2068	1-104-664-11	ELECT 47MF 20%	25V				
C2069	1-163-133-00	CERAMIC CHIP 470PF 5%	50V				
C2070	1-163-133-00	CERAMIC CHIP 470PF 5%	50V				



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D2014	8-719-977-22	DIODE DTZ9.1		Q102	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D2015	8-719-047-16	DIODE BAS216		Q103	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<FERRITE BEAD>		Q104	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
FB401	1-414-235-11	INDUCTOR CHIP 0UH		Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FB402	1-414-235-11	INDUCTOR CHIP 0UH		Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FB403	1-414-235-11	INDUCTOR CHIP 0UH		Q304	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
FB404	1-414-235-11	INDUCTOR CHIP 0UH		Q308	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FB405	1-414-235-11	INDUCTOR CHIP 0UH		Q309	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FB406	1-414-235-11	INDUCTOR CHIP 0UH		Q310	1-801-806-11	TRANSISTOR DTC144EKA-T146	
FB407	1-414-235-11	INDUCTOR CHIP 0UH		Q311	1-801-806-11	TRANSISTOR DTC144EKA-T146	
FB2001	1-414-235-11	INDUCTOR CHIP 0UH		Q312	1-801-806-11	TRANSISTOR DTC144EKA-T146	
FB2002	1-414-235-11	INDUCTOR CHIP 0UH		Q313	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FB2003	1-414-235-11	INDUCTOR CHIP 0UH		Q401	8-729-027-38	TRANSISTOR DTA144EKA-T146	
FB2004	1-414-235-11	INDUCTOR CHIP 0UH		Q402	1-801-806-11	TRANSISTOR DTC144EKA-T146	
FB2005	1-414-235-11	INDUCTOR CHIP 0UH		Q403	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FB2006	1-414-235-11	INDUCTOR CHIP 0UH		Q404	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<FILTER>		Q405	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL101	1-236-071-11	ENCAPSULATED COMPONENT		Q406	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL102	1-236-071-11	ENCAPSULATED COMPONENT		Q407	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL103	1-236-071-11	ENCAPSULATED COMPONENT		Q408	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL104	1-236-071-11	ENCAPSULATED COMPONENT		Q409	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL105	1-236-071-11	ENCAPSULATED COMPONENT		Q410	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL401	1-233-765-21	FILTER		Q412	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
FL402	1-233-765-21	FILTER		Q414	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL403	1-233-765-21	FILTER		Q415	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
FL1001	1-236-071-11	ENCAPSULATED COMPONENT		Q416	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
		<IC>		Q417	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC301	8-752-076-87	IC CXA2050S		Q418	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
IC401	8-759-436-89	IC MC141627FT		Q419	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
IC402	8-759-430-79	IC TDA8395T/N3		Q420	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
IC403	8-759-565-20	IC TDA4665T/V5-118		Q421	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC404	8-752-072-94	IC CXA1875AM-T4		Q422	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
IC1001	8-759-675-64	IC M24C08-MN6T(A)		Q423	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
IC1002	8-759-394-57	IC PST593C-MMP-4P		Q425	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1003	8-752-904-42	IC CXP85452-214Q (GE/HK/AUS MODEL)		Q426	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1003	8-752-904-61	IC CXP85452-229Q-TL (ME MODEL)		Q2001	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2001	8-759-090-21	IC TDA8424		Q2002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2002	8-752-068-45	IC CXA1855Q		Q2003	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2003	8-759-491-95	IC MSP3410D-PS-B4-T-ND		Q2004	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC2004	8-759-100-96	IC uPC4558G2		Q2005	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
IC2006	8-759-394-57	IC PST593C-MMP-4P		Q2006	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<JACK>		Q2007	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
J2001	1-565-666-12	TERMINAL, S 4P (S-VIDEO IN)		Q2008	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
J2002	1-784-652-11	JACK BLOCK, PIN 12P (AUDIO/VIDEO IN, OUT)		Q2009	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
		<COIL>		Q2010	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L101	1-412-006-31	INDUCTOR CHIP 10UH		Q2011	8-729-822-44	TRANSISTOR 2SA1524	
L102	1-412-005-11	INDUCTOR CHIP 8.2UH		Q2012	1-801-806-11	TRANSISTOR DTC144EKA-T146	
L103	1-412-005-11	INDUCTOR CHIP 8.2UH					
L104	1-410-993-11	INDUCTOR CHIP 1UH					
L105	1-412-006-31	INDUCTOR CHIP 10UH					
L301	1-408-603-31	INDUCTOR 10UH					
L401	1-412-002-31	INDUCTOR CHIP 4.7UH					
L1001	1-408-605-31	INDUCTOR 15UH					
		<TRANSISTOR>					
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6					



AG

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R121	1-216-095-00	RES,CHIP	82K 5%	R403	1-216-041-00	RES,CHIP	470 5%
R122	1-216-057-00	RES,CHIP	2.2K 5%	R404	1-216-025-11	RES,CHIP	100 5%
R123	1-208-845-11	RES,CHIP	1M 5%	R405	1-216-025-11	RES,CHIP	100 5%
R124	1-216-081-00	RES,CHIP	22K 5%	R406	1-216-025-11	RES,CHIP	100 5%
R125	1-216-065-00	RES,CHIP	4.7K 5%	R407	1-216-025-11	RES,CHIP	100 5%
R126	1-216-073-00	RES,CHIP	10K 5%	R408	1-216-025-11	RES,CHIP	100 5%
R127	1-216-097-00	RES,CHIP	100K 5%	R409	1-216-025-11	RES,CHIP	100 5%
R192	1-216-049-00	RES,CHIP	1K 5%	R410	1-216-025-11	RES,CHIP	100 5%
R193	1-216-049-00	RES,CHIP	1K 5%	R411	1-216-025-11	RES,CHIP	100 5%
R194	1-216-049-00	RES,CHIP	1K 5%	R412	1-216-025-11	RES,CHIP	100 5%
R195	1-216-049-00	RES,CHIP	1K 5%	R413	1-216-295-00	SHORT	0
R301	1-216-049-00	RES,CHIP	1K 5%	R414	1-216-073-00	RES,CHIP	10K 5%
R303	1-216-025-11	RES,CHIP	100 5%	R417	1-216-295-00	SHORT	0
R304	1-216-025-11	RES,CHIP	100 5%	R418	1-216-033-00	RES,CHIP	220 5%
R305	1-216-109-00	RES,CHIP	330K 5%	R419	1-216-652-11	METAL CHIP	1.1K 0.50%
R307	1-216-129-00	RES,CHIP	2.2M 5%	R420	1-216-081-00	RES,CHIP	22K 5%
R308	1-216-059-00	RES,CHIP	2.7K 5%	R421	1-216-049-00	RES,CHIP	1K 5%
R309	1-216-089-00	RES,CHIP	47K 5%	R422	1-216-041-00	RES,CHIP	470 5%
R310	1-216-089-00	RES,CHIP	47K 5%	R423	1-216-049-00	RES,CHIP	1K 5%
R311	1-216-025-11	RES,CHIP	100 5%	R424	1-216-033-00	RES,CHIP	220 5%
R315	1-216-049-00	RES,CHIP	1K 5%	R425	1-216-041-00	RES,CHIP	470 5%
R316	1-216-049-00	RES,CHIP	1K 5%	R426	1-216-049-00	RES,CHIP	1K 5%
R317	1-216-025-11	RES,CHIP	100 5%	R427	1-216-077-00	RES,CHIP	15K 5%
R318	1-216-025-11	RES,CHIP	100 5%	R428	1-216-025-11	RES,CHIP	100 5%
R319	1-216-025-11	RES,CHIP	100 5%	R429	1-216-025-11	RES,CHIP	100 5%
R320	1-216-025-11	RES,CHIP	100 5%	R430	1-216-025-11	RES,CHIP	100 5%
R321	1-216-025-11	RES,CHIP	100 5%	R431	1-216-025-11	RES,CHIP	100 5%
R322	1-216-025-11	RES,CHIP	100 5%	R432	1-216-001-00	RES,CHIP	10 5%
R323	1-216-061-00	RES,CHIP	3.3K 5%	R433	1-216-001-00	RES,CHIP	10 5%
R324	1-216-049-00	RES,CHIP	1K 5%	R434	1-216-057-00	RES,CHIP	2.2K 5%
R325	1-216-025-00	RES,CHIP	100 5%	R435	1-216-025-11	RES,CHIP	100 5%
R329	1-216-125-00	RES,CHIP	1.5M 5%	R437	1-216-025-11	RES,CHIP	100 5%
R331	1-216-041-00	RES,CHIP	470 5%	R440	1-216-067-00	RES,CHIP	5.6K 5%
R332	1-216-067-00	RES,CHIP	5.6K 5%	R441	1-216-065-00	RES,CHIP	4.7K 5%
R333	1-216-033-00	RES,CHIP	220 5%	R442	1-216-069-00	RES,CHIP	6.8K 5%
R335	1-216-129-00	RES,CHIP	2.2M 5%	R443	1-216-041-00	RES,CHIP	470 5%
R338	1-216-025-11	RES,CHIP	100 5%	R444	1-216-295-00	SHORT	0
R339	1-216-025-00	RES,CHIP	100 5%	R445	1-216-049-00	RES,CHIP	1K 5%
R340	1-216-295-00	SHORT	0	R446	1-216-081-00	RES,CHIP	22K 5%
R341	1-216-675-11	METAL CHIP	10K 0.50%	R447	1-216-049-00	RES,CHIP	1K 5%
R348	1-216-077-00	RES,CHIP	15K 5%	R448	1-216-049-00	RES,CHIP	1K 5%
R349	1-216-644-11	METAL CHIP	510 0.50%	R449	1-216-049-00	RES,CHIP	1K 5%
R350	1-216-053-00	RES,CHIP	1.5K 5%	R450	1-216-295-00	SHORT	0
R352	1-216-033-00	RES,CHIP	220 5%	R451	1-216-017-00	RES,CHIP	47 5%
R353	1-216-033-00	RES,CHIP	220 5%	R452	1-216-025-11	RES,CHIP	100 5%
R354	1-216-049-00	RES,CHIP	1K 5%	R453	1-216-089-00	RES,CHIP	47K 5%
R355	1-216-033-00	RES,CHIP	220 5%	R454	1-216-073-00	RES,CHIP	10K 5%
R356	1-216-025-00	RES,CHIP	100 5%	R455	1-216-025-00	RES,CHIP	100 5%
R357	1-216-025-00	RES,CHIP	100 5%	R456	1-216-025-00	RES,CHIP	100 5%
R358	1-216-025-00	RES,CHIP	100 5%	R457	1-216-057-00	RES,CHIP	2.2K 5%
R359	1-216-025-00	RES,CHIP	100 5%	R458	1-216-067-00	RES,CHIP	5.6K 5%
R360	1-216-057-00	RES,CHIP	2.2K 5%	R459	1-216-045-00	RES,CHIP	680 5%
R361	1-216-033-00	RES,CHIP	220 5%	R460	1-216-057-00	RES,CHIP	2.2K 5%
R362	1-216-057-00	RES,CHIP	2.2K 5%	R461	1-216-043-91	RES,CHIP	560 5%
R363	1-216-025-00	RES,CHIP	100 5%	R462	1-216-035-00	RES,CHIP	270 5%
R365	1-216-049-00	RES,CHIP	1K 5%	R463	1-216-025-11	RES,CHIP	100 5%
R366	1-216-049-00	RES,CHIP	1K 5%	R464	1-216-057-00	RES,CHIP	2.2K 5%
R367	1-216-093-91	RES,CHIP	68K 5%	R465	1-216-067-00	RES,CHIP	5.6K 5%
R368	1-216-133-00	RES,CHIP	3.3M 5%	R466	1-216-045-00	RES,CHIP	680 5%
R369	1-216-025-00	RES,CHIP	100 5%	R467	1-216-057-00	RES,CHIP	2.2K 5%
R370	1-216-057-00	RES,CHIP	2.2K 5%	R468	1-216-033-00	RES,CHIP	220 5%
R371	1-216-073-00	RES,CHIP	10K 5%	R469	1-216-041-00	RES,CHIP	470 5%
R372	1-216-049-00	RES,CHIP	1K 5%	R470	1-216-033-00	RES,CHIP	220 5%
R374	1-216-295-00	SHORT	0	R471	1-216-025-11	RES,CHIP	100 5%
R375	1-216-105-00	RES,CHIP	220K 5%	R472	1-216-033-00	RES,CHIP	220 5%
R401	1-216-041-00	RES,CHIP	470 5%	R473	1-216-025-00	RES,CHIP	100 5%
R402	1-216-041-00	RES,CHIP	470 5%	R474	1-216-025-00	RES,CHIP	100 5%
				R475	1-216-025-00	RES,CHIP	100 5%

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R476	1-216-049-00	RES,CHIP	1K 5%	R2008	1-216-041-00	RES,CHIP	470 5%
R1005	1-216-667-11	METAL CHIP	4.7K 0.50%	R2009	1-216-025-11	RES,CHIP	100 5%
R1006	1-216-667-11	METAL CHIP	4.7K 0.50%	R2010	1-216-025-11	RES,CHIP	100 5%
R1007	1-216-065-00	RES,CHIP	4.7K 5%	R2012	1-216-025-11	RES,CHIP	100 5%
R1008	1-216-065-00	RES,CHIP	4.7K 5%	R2013	1-216-025-11	RES,CHIP	100 5%
R1009	1-216-065-00	RES,CHIP	4.7K 5%	R2014	1-216-065-00	RES,CHIP	4.7K 5%
R1010	1-216-065-00	RES,CHIP	4.7K 5%	R2015	1-216-025-11	RES,CHIP	100 5%
R1011	1-216-025-11	RES,CHIP	100 5%	R2016	1-216-097-00	RES,CHIP	100K 5%
R1012	1-216-025-11	RES,CHIP	100 5%	R2017	1-216-065-00	RES,CHIP	4.7K 5%
R1013	1-216-025-11	RES,CHIP	100 5%	R2018	1-216-025-11	RES,CHIP	100 5%
R1014	1-216-025-11	RES,CHIP	100 5%	R2019	1-216-097-00	RES,CHIP	100K 5%
R1015	1-216-025-11	RES,CHIP	100 5%	R2020	1-216-057-00	RES,CHIP	2.2K 5%
R1016	1-216-025-11	RES,CHIP	100 5%	R2022	1-216-022-00	RES,CHIP	75 5%
R1017	1-216-025-11	RES,CHIP	100 5%	R2023	1-216-033-00	RES,CHIP	220 5%
R1018	1-216-025-11	RES,CHIP	100 5%	R2024	1-216-025-00	RES,CHIP	100 5%
R1019	1-216-025-11	RES,CHIP	100 5%	R2025	1-216-025-11	RES,CHIP	100 5%
R1020	1-216-025-11	RES,CHIP	100 5%	R2026	1-216-065-00	RES,CHIP	4.7K 5%
R1022	1-216-061-00	RES,CHIP	3.3K 5%	R2027	1-216-033-00	RES,CHIP	220 5%
R1023	1-216-061-00	RES,CHIP	3.3K 5%	R2028	1-216-025-11	RES,CHIP	100 5%
R1024	1-216-061-00	RES,CHIP	3.3K 5%	R2029	1-216-022-00	RES,CHIP	75 5%
R1025	1-216-033-00	RES,CHIP	220 5%	R2030	1-216-065-00	RES,CHIP	4.7K 5%
R1026	1-216-049-00	RES,CHIP	1K 5%	R2031	1-216-025-00	RES,CHIP	100 5%
R1027	1-216-065-00	RES,CHIP	4.7K 5%	R2032	1-216-022-00	RES,CHIP	75 5%
R1028	1-216-025-11	RES,CHIP	100 5%	R2033	1-216-033-00	RES,CHIP	220 5%
R1029	1-216-025-11	RES,CHIP	100 5%	R2034	1-216-061-00	RES,CHIP	3.3K 5%
R1031	1-216-295-00	SHORT	0	R2035	1-216-025-11	RES,CHIP	100 5%
R1032	1-216-073-00	RES,CHIP	10K 5%	R2036	1-216-113-00	RES,CHIP	470K 5%
R1033	1-216-295-00	SHORT	0	R2037	1-216-065-00	RES,CHIP	4.7K 5%
R1035	1-216-049-00	RES,CHIP	1K 5%	R2038	1-216-025-00	RES,CHIP	100 5%
R1036	1-216-025-11	RES,CHIP	100 5%	R2039	1-216-113-00	RES,CHIP	470K 5%
R1038	1-216-025-11	RES,CHIP	100 5%	R2040	1-216-065-00	RES,CHIP	4.7K 5%
R1039	1-216-025-11	RES,CHIP	100 5%	R2041	1-216-073-00	RES,CHIP	10K 5%
R1040	1-216-025-11	RES,CHIP	100 5%	R2042	1-216-022-00	RES,CHIP	75 5%
R1041	1-216-025-11	RES,CHIP	100 5%	R2043	1-216-033-00	RES,CHIP	220 5%
R1042	1-216-025-11	RES,CHIP	100 5%	R2044	1-216-033-00	RES,CHIP	220 5%
R1043	1-216-025-11	RES,CHIP	100 5%	R2045	1-216-033-00	RES,CHIP	220 5%
R1044	1-216-025-11	RES,CHIP	100 5%	R2046	1-216-073-00	RES,CHIP	10K 5%
R1047	1-216-025-00	RES,CHIP	100 5%	R2047	1-216-113-00	RES,CHIP	470K 5%
R1048	1-216-049-00	RES,CHIP	1K 5%	R2048	1-216-065-00	RES,CHIP	4.7K 5%
R1050	1-216-049-00	RES,CHIP	1K 5%	R2049	1-216-073-00	RES,CHIP	10K 5%
R1051	1-216-025-11	RES,CHIP	100 5%	R2050	1-216-025-00	RES,CHIP	100 5%
R1052	1-216-025-11	RES,CHIP	100 5%	R2051	1-216-113-00	RES,CHIP	470K 5%
R1053	1-216-025-11	RES,CHIP	100 5%	R2052	1-216-065-00	RES,CHIP	4.7K 5%
R1054	1-216-049-00	RES,CHIP	1K 5%	R2053	1-216-023-00	RES,CHIP	82 5%
R1055	1-216-025-11	RES,CHIP	100 5%	R2054	1-216-048-00	RES,CHIP	910 5%
R1056	1-216-025-11	RES,CHIP	100 5%	R2056	1-216-041-00	RES,CHIP	470 5%
R1057	1-216-025-11	RES,CHIP	100 5%	R2057	1-216-113-00	RES,CHIP	470K 5%
R1058	1-216-025-11	RES,CHIP	100 5%	R2058	1-216-089-00	RES,CHIP	47K 5%
R1060	1-216-025-11	RES,CHIP	100 5%	R2059	1-216-113-00	RES,CHIP	470K 5%
R1061	1-216-025-11	RES,CHIP	100 5%	R2060	1-216-089-00	RES,CHIP	47K 5%
R1062	1-216-025-11	RES,CHIP	100 5%	R2061	1-216-041-00	RES,CHIP	470 5%
R1064	1-216-073-00	RES,CHIP	10K 5%	R2063	1-216-113-00	RES,CHIP	470K 5%
R1065	1-216-073-00	RES,CHIP	10K 5%	R2064	1-216-021-00	RES,CHIP	68 5%
R1066	1-216-073-00	RES,CHIP	10K 5%	R2065	1-216-033-00	RES,CHIP	220 5%
R1067	1-216-073-00	RES,CHIP	10K 5%	R2066	1-216-039-00	RES,CHIP	390 5%
R1068	1-216-073-00	RES,CHIP	10K 5%	R2067	1-216-089-00	RES,CHIP	47K 5%
R1069	1-216-049-00	RES,CHIP	1K 5%	R2068	1-216-295-00	SHORT	0
R1070	1-216-049-00	RES,CHIP	1K 5%	R2069	1-216-039-00	RES,CHIP	390 5%
R1071	1-216-049-00	RES,CHIP	1K 5%	R2070	1-216-089-00	RES,CHIP	47K 5%
R1072	1-216-025-11	RES,CHIP	100 5%	R2071	1-216-295-00	SHORT	0
R2001	1-216-025-11	RES,CHIP	100 5%	R2072	1-216-025-11	RES,CHIP	100 5%
R2002	1-216-642-11	RES,CHIP	430 0.5%	R2073	1-216-025-11	RES,CHIP	100 5%
R2003	1-216-025-11	RES,CHIP	100 5%	R2074	1-216-025-11	RES,CHIP	100 5%
R2004	1-216-642-11	RES,CHIP	430 0.5%	R2075	1-216-025-11	RES,CHIP	100 5%
R2005	1-216-025-11	RES,CHIP	100 5%	R2076	1-216-025-11	RES,CHIP	100 5%
R2006	1-216-041-00	RES,CHIP	470 5%	R2077	1-216-025-11	RES,CHIP	100 5%
R2007	1-216-025-11	RES,CHIP	100 5%	R2078	1-249-389-11	CARBON	4.7 5%
				R2079	1-216-049-00	RES,CHIP	1K 5%

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION	REMARK
R2080	1-216-073-00	RES,CHIP 10K	5% 1/10W
R2081	1-216-089-00	RES,CHIP 47K	5% 1/10W
R2082	1-216-089-00	RES,CHIP 47K	5% 1/10W
R2083	1-216-048-00	RES,CHIP 910	5% 1/10W
R2084	1-216-041-00	RES,CHIP 470	5% 1/10W
R2085	1-216-063-91	RES,CHIP 3.9K	5% 1/10W
R2086	1-216-057-00	RES,CHIP 2.2K	5% 1/10W
R2087	1-216-049-00	RES,CHIP 1K	5% 1/10W
R2088	1-216-089-00	RES,CHIP 47K	5% 1/10W
R2089	1-216-089-00	RES,CHIP 47K	5% 1/10W
R2090	1-216-065-00	RES,CHIP 4.7K	5% 1/10W
R2091	1-216-089-00	RES,CHIP 47K	5% 1/10W
R2092	1-216-089-00	RES,CHIP 47K	5% 1/10W
R2093	1-216-065-00	RES,CHIP 4.7K	5% 1/10W
R2094	1-216-065-00	RES,CHIP 4.7K	5% 1/10W
R2095	1-216-065-00	RES,CHIP 4.7K	5% 1/10W
R2096	1-216-065-00	RES,CHIP 4.7K	5% 1/10W
R2097	1-216-065-00	RES,CHIP 4.7K	5% 1/10W
R2098	1-208-757-11	METAL,CHIP 91	0.5% 1/10W
R2099	1-216-025-11	RES,CHIP 100	5% 1/10W
R2100	1-216-025-11	RES,CHIP 100	5% 1/10W
R2101	1-216-295-00	SHORT 0	
R2102	1-216-065-00	RES,CHIP 4.7K	5% 1/10W
R2103	1-216-025-00	RES,CHIP 100	5% 1/10W
R3301	1-216-295-00	SHORT 0	
R3302	1-216-295-00	SHORT 0	
R3303	1-216-295-00	SHORT 0	
R3390	1-216-039-00	RES,CHIP 390	5% 1/10W

<TUNER>

TU101  $\Delta$  8-598-372-20 TUNER, FSS BTF-FG441

<CRYSTAL>

X301 1-767-127-11 VIBRATOR, CERAMIC(500KHz)  
X302 1-567-504-11 OSCILLATOR, CRYSTAL(4.43MHz)  
X303 1-567-505-11 OSCILLATOR, CRYSTAL(3.58MHz)  
X1001 1-577-358-21 VIBRATOR, CERAMIC(4.0MHz)  
X2001 1-760-628-11 VIBRATOR, CRYSTAL(18.432MHz)

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\* A-1316-394-A G BOARD, COMPLETE  
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4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C6001	$\Delta$ 1-119-894-51	CERAMIC	2200PF	20%	250V
C6002	$\Delta$ 1-104-708-51	FILM	0.47MF	20%	250V
C6003	1-126-943-11	ELECT	2200MF	20%	25V
C6004	1-104-665-11	ELECT	100MF	20%	25V
C6006	$\Delta$ 1-104-706-51	FILM	0.22MF	20%	250V
C6007	$\Delta$ 1-119-894-51	CERAMIC	2200PF	20%	250V
C6009	1-102-114-00	CERAMIC	470PF	10%	50V
C6010	1-102-112-00	CERAMIC	330PF	10%	50V
C6011	1-107-678-11	ELECT	4.7MF	20%	450V
C6012	1-102-112-00	CERAMIC	330PF	10%	50V
C6013	1-117-227-11	FILM	1MF	10%	450V
C6014	1-126-968-11	ELECT	100MF	20%	50V
C6016	1-126-964-11	ELECT	10MF	20%	50V
C6018	1-119-868-11	ELECT	820MF	20%	450V
C6019	1-104-664-11	ELECT	47MF	20%	25V
C6020	1-104-665-11	ELECT	100MF	20%	25V
C6021	1-126-961-11	ELECT	2.2MF	20%	50V

REF. NO.	PART NO.	DESCRIPTION	REMARK
C6022	1-137-370-11	FILM 0.01MF	5% 50V
C6023	1-102-112-00	CERAMIC 330PF	10% 50V
C6024	1-126-960-11	ELECT 1MF	20% 50V
C6025	1-136-165-00	FILM 0.1MF	5% 50V
C6026	1-104-665-11	ELECT 100MF	20% 25V
C6028	1-125-969-91	CERAMIC 680PF	10% 1KV
C6029	1-125-969-91	CERAMIC 680PF	10% 1KV
C6030	1-115-405-11	FILM 0.039MF	3% 1KV
C6031	1-126-964-11	ELECT 10MF	20% 50V
C6032	1-126-964-11	ELECT 10MF	20% 50V
C6033	1-136-479-11	FILM 0.001MF	2% 50V
C6034	1-101-810-00	CERAMIC 100PF	5% 500V
C6035	1-101-810-00	CERAMIC 100PF	5% 500V
C6036	1-126-768-11	ELECT 2200MF	20% 16V
C6037	1-126-943-11	ELECT 2200MF	20% 25V
C6038	1-128-548-11	ELECT 4700MF	20% 25V
C6039	1-126-972-11	ELECT 1000MF	20% 50V
C6040	1-126-972-11	ELECT 1000MF	20% 50V
C6041	1-126-960-11	ELECT 1MF	20% 50V
C6042	1-104-665-11	ELECT 100MF	20% 25V
C6043	1-126-964-11	ELECT 10MF	20% 50V
C6044	1-107-641-11	ELECT 220MF	20% 160V
C6045	1-104-665-11	ELECT 100MF	20% 25V
C6046	1-104-665-11	ELECT 100MF	20% 25V
C6047	1-102-112-00	CERAMIC 330PF	10% 50V
C6048	1-126-960-11	ELECT 1MF	20% 50V
C6049	1-136-165-00	FILM 0.1MF	5% 50V
C6050	1-109-954-11	ELECT 0.47MF	20% 160V
C6051	1-126-935-11	ELECT 470MF	20% 6.3V
C6052	1-125-969-91	CERAMIC 680PF	10% 1KV
C6053	1-125-969-91	CERAMIC 680PF	10% 1KV
C6055	1-107-641-11	ELECT 220MF	20% 160V
C6056	1-137-370-11	FILM 0.01MF	5% 50V
C6058	1-102-114-00	CERAMIC 470PF	10% 50V
C6059	1-102-114-00	CERAMIC 470PF	10% 50V
C6060	1-102-114-00	CERAMIC 470PF	10% 50V
C6061	1-102-114-00	CERAMIC 470PF	10% 50V
C6062	1-102-114-00	CERAMIC 470PF	10% 50V
C6063	1-102-114-00	CERAMIC 470PF	10% 50V
C6064	$\Delta$ 1-161-964-51	CERAMIC 0.0047MF	250V
C6065	$\Delta$ 1-161-964-51	CERAMIC 0.0047MF	250V

<CONNECTOR>

CN6001 1-695-915-11 TAB (CONTACT)  
CN6002 1-695-915-11 TAB (CONTACT)  
CN6005 \* 1-580-843-11 PIN, CONNECTOR (POWER)  
CN6006 \* 1-580-689-11 PIN, CONNECTOR (PC BOARD) 4P  
CN6007 \* 1-691-291-11 PIN, CONNECTOR (PC BOARD) 5P

CN6008 \* 1-564-509-11 PLUG, CONNECTOR 6P  
CN6009 1-695-915-11 TAB (CONTACT)  
CN6011 \* 1-573-986-11 PIN, CONNECTOR (PC BOARD) 5P  
CN6012 \* 1-508-766-00 PIN, CONNECTOR (5mm PITCH) 4P  
CN6013 \* 1-508-765-00 PIN, CONNECTOR (5mm PITCH) 3P

<DIODE>

D6001 8-719-110-31 DIODE RD12ESB2  
D6002 8-719-052-91 DIODE D4SBS4-F  
D6003 8-719-022-99 DIODE D6SB60L  
D6004 8-719-057-96 DIODE D10SC6M-4012  
D6005 8-719-921-88 DIODE MTZJ-13B  
D6006 8-719-991-33 DIODE 1SS133T-77  
D6007 8-719-911-55 DIODE U05G  
D6008 8-719-979-64 DIODE UF4005PKG23  
D6009 8-719-059-23 DIODE P6KE200AG23  
D6010 8-719-028-72 DIODE RGP02-17EL-6433  
D6011 8-719-982-26 DIODE MTZJ-33B

The components identified by shading and mark  $\Delta$  are critical for safety.  
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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D6012	8-719-991-33	DIODE ISS133T-77		<IC LINK>			
D6013	8-719-110-03	DIODE RD7.5ESB2		PS6001	$\Delta$ 1-533-595-31	LINK, IC	
D6014	8-719-991-33	DIODE ISS133T-77		PS6002	$\Delta$ 1-533-595-31	LINK, IC	
D6015	8-719-991-33	DIODE ISS133T-77		PS6003	$\Delta$ 1-533-597-31	LINK, IC	
D6016	8-719-991-33	DIODE ISS133T-77		<TRANSISTOR>			
D6017	8-719-063-73	DIODE D1NL20U-TR		Q6001	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D6018	8-719-991-33	DIODE ISS133T-77		Q6002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D6019	8-719-991-33	DIODE ISS133T-77		Q6003	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
D6020	8-719-991-33	DIODE ISS133T-77		Q6004	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D6021	8-719-979-64	DIODE UF4005PKG23		Q6005	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
D6022	8-719-110-53	DIODE RD20ESB2		Q6006	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D6023	8-719-979-64	DIODE UF4005PKG23		Q6007	8-729-028-10	TRANSISTOR IRFI744G-LF	
D6024	8-719-110-53	DIODE RD20ESB2		Q6008	8-729-028-10	TRANSISTOR IRFI744G-LF	
D6025	8-719-063-73	DIODE D1NL20U-TR		Q6009	8-729-140-97	TRANSISTOR 2SB734-34	
D6026	8-719-110-53	DIODE RD20ESB2		Q6010	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D6027	8-719-110-53	DIODE RD20ESB2		Q6011	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D6028	8-719-911-19	DIODE ISS119-25		Q6012	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
D6029	8-719-991-33	DIODE ISS133T-77		Q6013	8-729-820-82	TRANSISTOR 2SA1208-T	
D6032	8-719-991-33	DIODE ISS133T-77		Q6014	8-729-028-10	TRANSISTOR IRFI744G-LF	
D6033	8-719-991-33	DIODE ISS133T-77		Q6015	8-729-028-10	TRANSISTOR IRFI744G-LF	
D6035	8-719-018-83	DIODE D2S4M		Q6016	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
D6036	8-719-018-83	DIODE D2S4M		Q6017	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
D6037	8-719-031-78	DIODE S2L40F		Q6018	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D6038	8-719-312-47	DIODE RBA-406B		<RESISTOR>			
D6042	8-719-979-64	DIODE UF4005PKG23		R6000	$\Delta$ 1-202-885-91	SOLID 1M 20% 1/2W	
D6043	8-719-110-53	DIODE RD20ESB2		R6001	1-216-049-00	RES,CHIP 1K 5% 1/10W	
D6044	8-719-979-64	DIODE UF4005PKG23		R6002	$\Delta$ 1-218-265-21	METAL 8.2M 5% 1W	
D6045	8-719-110-53	DIODE RD20ESB2		R6003	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
D6046	8-719-110-53	DIODE RD20ESB2		R6004	1-215-481-00	METAL 330K 1% 1/4W	
D6047	8-719-110-53	DIODE RD20ESB2		R6005	1-215-481-00	METAL 330K 1% 1/4W	
D6048	8-719-921-88	DIODE MTZJ-13B		R6006	1-215-482-00	METAL 360K 1% 1/4W	
D6049	8-719-031-78	DIODE S2L40F		R6007	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
D6050	8-719-991-33	DIODE ISS133T-77		R6008	1-216-099-00	RES,CHIP 120K 5% 1/10W	
D6051	8-719-991-33	DIODE ISS133T-77		R6009	1-215-479-00	METAL 270K 1% 1/4W	
<FUSE>				R6010	1-215-479-00	METAL 270K 1% 1/4W	
F6001	$\Delta$ 1-576-232-11	FUSE (H.B.C.) 5A/250V		R6011	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
	1-533-230-11	HOLDER, FUSE ; F6001		R6012	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
<FERRITE BEAD>				R6013	1-202-962-11	CEMENTED 3.3 5% 10W	
FB6009	1-410-397-21	FERRITE 1.1UH		R6014	1-216-089-00	RES,CHIP 47K 5% 1/10W	
<IC>				R6015	1-247-895-00	CARBON 470K 5% 1/4W	
IC6001	$\Delta$ 8-759-468-89	IC TOP209P		R6016	1-216-089-00	RES,CHIP 47K 5% 1/10W	
IC6002	8-759-103-93	IC uPC393C		R6017	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
IC6003	8-759-185-47	IC IR2112		R6018	1-216-089-00	RES,CHIP 47K 5% 1/10W	
IC6004	8-759-077-25	IC IR3M02A		R6019	1-216-089-00	RES,CHIP 47K 5% 1/10W	
IC6005	$\Delta$ 8-749-924-35	PHOTO COUPLER ON3171-R		R6020	1-216-691-11	METAL CHIP 47K 0.50% 1/10W	
IC6006	$\Delta$ 8-749-924-35	PHOTO COUPLER ON3171-R		R6021	1-216-081-00	RES,CHIP 22K 5% 1/10W	
IC6007	8-759-185-47	IC IR2112		R6022	1-247-791-91	CARBON 22 5% 1/4W	
IC6008	8-749-920-61	IC SE-135N		R6023	1-216-049-00	RES,CHIP 1K 5% 1/10W	
<COIL>				R6024	$\Delta$ 1-240-303-11	CMT,MELF 0.22 5% 10W	
L6002	1-412-525-31	INDUCTOR 10UH		R6025	1-249-402-11	CARBON 56 5% 1/4W	F
L6003	1-412-525-31	INDUCTOR 10UH		R6026	$\Delta$ 1-240-303-11	CMT,MELF 0.22 5% 10W	
L6004	1-412-525-31	INDUCTOR 10UH		R6027	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
L6005	1-412-525-31	INDUCTOR 10UH		R6028	1-249-437-11	CARBON 47K 5% 1/4W	
L6006	1-412-525-31	INDUCTOR 10UH		R6029	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
L6008	1-412-533-21	INDUCTOR 47UH		R6030	1-216-049-00	RES,CHIP 1K 5% 1/10W	
L6009	1-412-523-41	INDUCTOR 6.8UH		R6031	1-216-073-00	RES,CHIP 10K 5% 1/10W	
L6010	1-412-523-41	INDUCTOR 6.8UH		R6033	$\Delta$ 1-220-886-61	FUSIBLE 0.1 10% 1W	F
L6011	1-412-525-31	INDUCTOR 10UH		R6034	1-216-113-00	RES,CHIP 470K 5% 1/10W	
L6012	1-406-971-21	INDUCTOR 10UH		R6035	1-216-049-00	RES,CHIP 1K 5% 1/10W	
				R6036	1-216-073-00	RES,CHIP 10K 5% 1/10W	
				R6037	1-216-065-00	RES,CHIP 4.7K 5% 1/10W	
				R6038	1-216-295-00	SHORT 0	
				R6039	1-216-073-00	RES,CHIP 10K 5% 1/10W	
				R6040	1-216-073-00	RES,CHIP 10K 5% 1/10W	

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R6041	1-249-397-11	CARBON	22 5% 1/4W F	C735	1-161-830-00	CERAMIC	0.0047MF 500V
R6042	1-249-397-11	CARBON	22 5% 1/4W F	C736	1-162-115-00	CERAMIC	330PF 10% 2KV
R6043	1-249-425-11	CARBON	4.7K 5% 1/4W F	C737	1-107-662-11	ELECT	22MF 20% 250V
R6044	1-249-425-11	CARBON	4.7K 5% 1/4W F	C738	1-101-880-00	CERAMIC	47PF 5% 50V
R6045	1-216-657-11	METAL CHIP	1.8K 0.50% 1/10W	C739	1-104-664-11	ELECT	47MF 20% 25V
R6046	1-216-081-00	RES,CHIP	22K 5% 1/10W	C741	1-104-664-11	ELECTC	47MF 20% 25V
R6047	1-249-437-11	CARBON	47K 5% 1/4W	<CONNECTOR>			
R6048	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	CN731	1-695-915-11	TAB (CONTACT)	
R6049	1-216-073-00	RES,CHIP	10K 5% 1/10W	CN732	* 1-564-508-11	PLUG, CONNECTOR 5P	
R6050	1-216-049-91	RES,CHIP	1K 5% 1/10W	CN733	* 1-564-511-11	PLUG, CONNECTOR 8P	
R6051	1-216-674-11	METAL CHIP	9.1K 0.50% 1/10W	CN734	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P	
R6052	1-216-049-00	RES,CHIP	1K 5% 1/10W	CN735	$\Delta$ 1-251-182-41	SOCKET, PICTURE TUBE	
R6053	1-249-417-11	CARBON	1K 5% 1/4W	CN736	* 1-564-512-11	PLUG, CONNECTOR 9P	
R6054	1-216-049-00	RES,CHIP	1K 5% 1/10W	CN737	* 1-564-512-11	PLUG, CONNECTOR 9P	
R6055	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	<DIODE>			
R6056	1-216-073-00	RES,CHIP	10K 5% 1/10W	D731	8-719-991-33	DIODE 1SS133T-77	
R6057	1-216-073-00	RES,CHIP	10K 5% 1/10W	D732	8-719-991-33	DIODE 1SS133T-77	
R6058	1-216-073-00	RES,CHIP	10K 5% 1/10W	D733	8-719-991-33	DIODE 1SS133T-77	
R6059	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	D735	8-719-991-33	DIODE 1SS133T-77	
R6060	1-249-413-11	CARBON	470 5% 1/4W F	D736	8-719-991-33	DIODE 1SS133T-77	
R6061	1-215-477-00	METAL	220K 1% 1/4W	<COIL>			
R6062	1-249-417-11	CARBON	1K 5% 1/4W F	L731	1-408-623-31	INDUCTOR 470UH	
R6063	1-249-397-11	CARBON	22 5% 1/4W F	L732	1-408-617-31	INDUCTOR 150UH	
R6064	1-249-397-11	CARBON	22 5% 1/4W F	<TRANSISTOR>			
R6065	1-249-441-11	CARBON	100K 5% 1/4W	Q731	8-729-200-17	TRANSISTOR 2SA1091-O	
R6066	1-216-366-00	METAL OXIDE	0.56 5% 2W F	Q732	8-729-045-56	TRANSISTOR 2SC2611-15	
R6067	1-249-425-11	CARBON	4.7K 5% 1/4W F	Q733	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
R6068	1-249-425-11	CARBON	4.7K 5% 1/4W F	Q734	8-729-119-76	TRANSISTOR 2SA-1309A-QRSTA	
R6069	1-215-477-00	METAL	220K 1% 1/4W	Q735	8-729-423-33	TRANSISTOR 2SA-1309A-QRSTA	
R6070	1-249-417-11	CARBON	1K 5% 1/4W F	<RESISTOR>			
R6071	1-215-453-00	METAL	22K 1% 1/4W	R731	1-219-743-11	CARBON	100 5% 1/2W
R6072	1-215-476-00	METAL	200K 1% 1/4W	R732	1-260-132-11	CARBON	560K 5% 1/2W
R6073	1-216-041-00	RES,CHIP	470 5% 1/10W	R733	1-216-487-11	METAL OXIDE	12K 5% 3W F
R6075	1-216-358-11	METAL OXIDE	5.6 5% 1W F	R734	1-216-487-11	METAL OXIDE	12K 5% 3W F
R6079	1-249-377-11	CARBON	0.47 5% 1/4W F	R735	1-247-807-31	CARBON	100 5% 1/4W
R6080	1-249-377-11	CARBON	0.47 5% 1/4W F	R736	1-249-425-11	CARBON	4.7K 5% 1/4W
R6081	1-249-377-11	CARBON	0.47 5% 1/4W F	R737	1-260-328-11	CARBON	1K 5% 1/2W
R6082	1-249-377-11	CARBON	0.47 5% 1/4W F	R738	1-249-404-11	CARBON	82 5% 1/4W
R6083	1-249-377-11	CARBON	0.47 5% 1/4W F	R739	1-260-133-11	CARBON	680K 5% 1/2W
R6084	1-249-377-11	CARBON	0.47 5% 1/4W F	R740	1-202-818-00	SOLID	1K 20% 1/2W
R6085	$\Delta$ 1-212-849-61	FUSIBLE	4.7 5% 1/4W F	R741	1-247-791-91	CARBON	22 5% 1/4W
R6086	1-216-073-00	RES,CHIP	10K 5% 1/10W	R742	1-249-409-11	CARBON	220 5% 1/4W
R6087	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R744	1-247-891-00	CARBON	330K 5% 1/4W
R6088	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R746	1-202-814-11	SOLID	33K 20% 1/2W
R6089	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R750	1-249-437-11	CARBON	47K 4% 1/4W
R6094	1-216-073-00	RES,CHIP	10K 5% 1/10W	R751	1-202-814-00	METAL	20K 1% 1/4W
<RELAY>				<SPARK GAP>			
RY6003	$\Delta$ 1-515-999-11	RELAY, POWER		SG731	1-519-422-11	GAP, SPARK	
<TRANSFORMER>				SG732	1-519-422-11	GAP, SPARK	
T6002	$\Delta$ 1-431-207-11	TRANSFORMER, LINE FILTER		SG733	1-519-422-11	GAP, SPARK	
T6004	$\Delta$ 1-431-732-12	TRANSFORMER, CONVERTER (SRT)		*****			
T6005	$\Delta$ 1-429-807-12	TRANSFORMER, CONVERTER (PIT)		* A-1332-126-A CG BOARD, MOUNT			
<CAPACITOR>				*****			
C733	1-162-115-00	CERAMIC	330PF 10% 2KV				
C734	1-102-116-00	CERAMIC	680PF 10% 50V				



The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
* A-1332-127-A CB BOARD, MOUNT *****			
<CAPACITOR>			
C762	1-126-964-11	ELECT 10MF 20% 50V	
C763	1-162-115-00	CERAMIC 330PF 10% 2KV	
C764	1-102-116-00	CERAMIC 680PF 10% 50V	
C765	1-161-830-00	CERAMIC 0.0047MF 500V	
C766	1-162-115-00	CERAMIC 330PF 10% 2KV	
C767	1-107-662-11	ELECT 22MF 20% 250V	
C768	1-101-880-00	CERAMIC 47PF 5% 50V	
C769	1-104-664-11	ELECT 47MF 20% 25V	
C769	1-104-664-11	ELECT 47UF 20% 25V	
<CONNECTOR>			
CN761	1-695-915-11	TAB (CONTACT)	
CN762	* 1-564-508-11	PLUG, CONNECTOR 5P	
CN763	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P	
CN764	$\Delta$ 1-251-182-41	SOCKET, PICTURE TUBE	
CN765	* 1-564-512-11	PLUG, CONNECTOR 9P	
CN766	* 1-764-333-11	PLUG, CONNECTOR 10P	
<DIODE>			
D761	8-719-991-33	DIODE 1SS133T-77	
D762	8-719-991-33	DIODE 1SS133T-77	
D763	8-719-991-33	DIODE 1SS133T-77	
D765	8-719-991-33	DIODE 1SS133T-77	
D766	8-719-991-33	DIODE 1SS133T-77	
<COIL>			
L761	1-408-623-31	INDUCTOR 470UH	
L762	1-408-617-31	INDUCTOR 150UH	
<TRANSISTOR>			
Q761	8-729-200-17	TRANSISTOR 2SA1091-O	
Q762	8-729-045-56	TRANSISTOR 2SC2611-15	
Q763	8-729-423-33	TRANSISTOR 2SC2785-HFE	
Q764	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q765	8-729-119-76	TRANSISTOR 2SA1175-HFE	
<RESISTOR>			
R761	1-219-743-11	CARBON 100 5% 1/2W	
R762	1-260-132-11	CARBON 560K 5% 1/2W	
R763	1-215-487-11	METAL OXIDE 12K 5% 3W	
R764	1-215-487-11	METAL OXIDE 12K 5% 3W	
R765	1-247-807-31	CARBON 100 5% 1/4W	
R766	1-260-328-11	CARBON 1K 5% 1/2W	
R767	1-249-425-11	CARBON 4.7K 5% 1/4W	
R768	1-260-133-11	CARBON 680K 5% 1/2W	
R769	1-202-818-00	SOLID 1K 20% 1/2W	
R770	1-247-807-31	CARBON 100 5% 1/4W	
R771	1-219-743-11	CARBON 100 5% 1/2W	
R772	1-247-791-91	CARBON 22 5% 1/4W	
R773	1-247-807-31	CARBON 100 5% 1/4W	
R774	1-247-899-11	CARBON 680K 5% 1/4W	
R776	1-249-437-11	CARBON 47K 5% 1/4W	
R777	1-249-419-11	CARBON 1.5K 5% 1/4W	
R778	1-202-814-11	SOLID 33K 20% 1/2W	
R779	1-249-409-11	CARBON 220 5% 14W	
R781	1-249-437-11	SOLID 47K 5% 1/2W	
R782	1-249-431-11	CARBON 15k 5% 1/4W	

REF. NO.	PART NO.	DESCRIPTION	REMARK
<SPARK GAP>			
SG761	1-519-422-11	GAP, SPARK	
SG762	1-519-422-11	GAP, SPARK	
SG763	1-519-422-11	GAP, SPARK	
*****			
* A-1332-125-A CR BOARD, MOUNT *****			
<CAPACITOR>			
C702	1-102-115-00	CERAMIC 560PF 10% 50V	
C703	1-104-664-11	ELECT 47MF 20% 25V	
C705	$\Delta$ 1-162-115-00	CERAMIC 330PF 10% 2KV	
C708	1-101-880-00	CERAMIC 47PF 5% 50V	
C709	1-162-115-00	CERAMIC 330PF 10% 2KV	
C712	1-107-662-11	ELECT 22MF 20% 250V	
C713	1-104-664-11	ELECT 47MF 20% 25V	
<CONNECTOR>			
CN701	1-695-915-11	TAB (CONTACT)	
CN702	* 1-564-511-11	PLUG, CONNECTOR 8P	
CN703	* 1-564-510-11	PLUG, CONNECTOR 7P	
CN704	* 1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P	
CN705	$\Delta$ 1-251-182-41	SOCKET, PICTURE TUBE	
CN706	* 1-564-512-11	PLUG, CONNECTOR 9P	
<DIODE>			
D701	8-719-991-33	DIODE 1SS133T-77	
D704	8-719-991-33	DIODE 1SS133T-77	
D705	8-719-991-33	DIODE 1SS133T-77	
D706	8-719-991-33	DIODE 1SS133T-77	
D708	8-719-991-33	DIODE 1SS133T-77	
D709	8-719-109-84	DIODE RD5.1ESB1	
<COIL>			
L701	1-410-682-31	INDUCTOR 470UH	
L702	1-408-617-31	INDUCTOR 150UH	
<TRANSISTOR>			
Q701	8-729-200-17	TRANSISTOR 2SA1091-O	
Q702	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q703	8-729-045-56	TRANSISTOR 2SC2611-15	
Q704	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q705	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q706	8-729-119-76	TRANSISTOR 2SA1175-HFE	
<RESISTOR>			
R701	1-219-743-11	CARBON 100 5% 1/2W	
R704	1-260-132-11	CARBON 560K 5% 1/2W	
R705	1-249-437-11	CARBON 47K 5% 1/4W	
R706	1-249-425-11	CARBON 4.7K 5% 1/4W	
R707	1-247-807-31	CARBON 100 5% 1/4W	
R708	1-247-807-11	CARBON 100 5% 1/4W	
R709	1-260-328-11	CARBON 1K 5% 1/2W	
R710	1-247-791-91	CARBON 22 5% 1/4W	
R711	1-216-487-11	METAL OXIDE 12K 5% 3W	
R712	1-216-487-11	METAL OXIDE 12K 5% 3W	
R713	1-216-454-00	METAL 24K 1% 1/4W	
R714	1-202-818-00	SOLID 1K 20% 1/2W	



REF. NO.	PART NO.	DESCRIPTION	REMARK
R715	1-260-133-11	CARBON 680K 5%	1/2W
R716	1-249-409-11	CARBON 220 5%	1/4W
R717	1-249-435-11	CARBON 33K 5%	1/4W
R718	1-249-437-11	CARBON 47K 5%	1/4W
R719	1-219-743-11	CARBON 100 5%	1/2W
R721	1-202-814-11	SOLID 33K 20%	1/2W
R722	1-249-433-11	CARBON 22K 5%	1/4W
R723	1-249-437-11	CARBON 47K 5%	1/4W

<SPARK GAP>

SG701	1-519-422-11	GAP, SPARK
SG702	1-519-422-11	GAP, SPARK
SG703	1-519-422-11	GAP, SPARK

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\* A-1342-592-A V2 BOARD, MOUNT  
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<CAPACITOR>

C3506	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C3507	1-126-933-11	ELECT 100MF	20% 16V
C3509	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C3510	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C3511	1-126-963-11	ELECT 4.7MF	20% 50V
C3512	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C3513	1-163-239-11	CERAMIC CHIP 33PF	5% 50V
C3514	1-163-239-11	CERAMIC CHIP 33PF	5% 50V
C3515	1-109-982-11	CERAMIC CHIP 1MF	10% 10V
C3517	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C3522	1-104-664-11	ELECT 47MF	20% 16V
C3524	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C3525	1-126-933-11	ELECT 100MF	20% 16V
C3530	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C3532	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C3538	1-163-233-11	CERAMIC CHIP 18PF	5% 50V
C3539	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V

<CONNECTOR>

CN3501	* 1-564-508-11	PLUG, CONNECTOR 5P
CN3502	* 1-564-515-11	PLUG, CONNECTOR 12P

<DIODE>

D3502	8-719-914-44	DIODE DAP202K
D3503	8-719-105-46	DIODE RD3.3M-B2

<FERRITE BEAD>

FB3501	1-410-682-31	INDUCTOR 470UH
FB3502	1-410-397-21	FERRITE 1.1UH
FB3503	1-410-397-21	FERRITE 1.1UH
FB3504	1-410-397-21	FERRITE 1.1UH
FB3505	1-410-397-21	FERRITE 1.1UH

<IC>

IC3501	8-759-476-87	IC SAA5261
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<CHIP CONDUCTOR>

JR3501	1-216-295-11	SHORT 0
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REF. NO.	PART NO.	DESCRIPTION	REMARK
		<TRANSISTOR>	
Q3501	8-729-230-49	TRANSISTOR 2SC2712-YG	
Q3502	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3506	8-729-901-00	TRANSISTOR DTC124EK	
Q3507	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3509	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3510	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

R3501	1-216-295-00	SHORT	0		
R3504	1-216-295-00	SHORT	0		
R3507	1-216-295-00	SHORT	0		
R3508	1-216-295-00	SHORT	0		
R3509	1-216-295-00	SHORT	0		
R3511	1-216-025-00	RES,CHIP	100	5%	1/10W
R3512	1-216-295-00	SHORT	0		
R3514	1-216-025-00	RES,CHIP	100	5%	1/10W
R3515	1-216-073-00	RES,CHIP	10K	5%	1/10W
R3517	1-216-295-00	SHORT	0		
R3518	1-216-295-00	SHORT	0		
R3519	1-216-295-00	SHORT	0		
R3522	1-216-295-00	SHORT	0		
R3526	1-216-295-00	SHORT	0		
R3527	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R3528	1-216-065-00	RES,CHIP	4.7K	5%	1/10W
R3529	1-216-049-00	RES,CHIP	1K	5%	1/10W
R3533	1-216-025-00	RES,CHIP	100	5%	1/10W
R3535	1-216-295-00	SHORT	0		
R3539	1-216-025-00	RES,CHIP	100	5%	1/10W
R3540	1-216-295-00	SHORT	0		
R3542	1-216-049-00	RES,CHIP	1K	5%	1/10W
R3544	1-216-295-00	SHORT	0		
R3546	1-216-025-00	RES,CHIP	100	5%	1/10W
R3547	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R3548	1-216-049-00	RES,CHIP	1K	5%	1/10W
R3549	1-216-049-00	RES,CHIP	1K	5%	1/10W
R3550	1-216-041-00	RES,CHIP	470	5%	1/10W
R3551	1-216-025-00	RES,CHIP	100	5%	1/10W
R3552	1-216-025-00	RES,CHIP	100	5%	1/10W
R3554	1-216-083-00	RES,CHIP	27K	5%	1/10W
R3555	1-216-049-00	RES,CHIP	1K	5%	1/10W
R3556	1-216-041-00	RES,CHIP	470	5%	1/10W
R3557	1-216-295-00	SHORT	0		
R3558	1-216-025-00	RES,CHIP	100	5%	1/10W
R3559	1-216-049-00	RES,CHIP	1K	5%	1/10W
R3560	1-216-041-00	RES,CHIP	470	5%	1/10W
R3563	1-216-049-00	RES,CHIP	1K	5%	1/10W
R3571	1-216-049-00	RES,CHIP	1K	5%	1/10W

<CRYSTAL>

X3501	1-578-774-11	VIBRATOR, CRYSTAL(12MHz)
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\* A-1348-005-A D BOARD, COMPLETE  
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4-066-101-01	SPACER, INSULATING
4-070-912-01	HEAT SINK, V OUT
4-382-854-11	SCREW (M3X10), P, SW (+)

<CAPACITOR>

C1501	1-163-005-11	CERAMIC CHIP 470PF	10%	50V
C1503	1-137-399-11	FILM 0.1MF	5%	100V



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1504	1-164-690-91	CERAMIC CHIP 0.0022MF	5% 50V	C1717	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1506	1-126-969-11	ELECT 220MF	20% 50V	C1718	1-126-968-11	ELECT 100MF	20% 50V
C1507	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C1719	1-126-968-11	ELECT 100MF	20% 50V
C1508	1-137-401-11	FILM 0.22MF	10% 100V	C1720	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1509	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C1721	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1510	1-126-972-11	ELECT 1000MF	20% 50V	C1723	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
C1511	1-126-972-11	ELECT 1000MF	20% 50V	C1724	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1512	1-126-960-11	ELECT 1MF	20% 50V	C1725	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1513	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1726	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1514	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1727	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1516	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C1802	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1517	1-126-964-11	ELECT 10MF	20% 50V	C1803	1-126-935-11	ELECT 470MF	20% 16V
C1518	1-126-933-11	ELECT 100MF	20% 16V	C1804	1-126-964-11	ELECT 10MF	20% 50V
C1519	1-126-933-11	ELECT 100MF	20% 16V	C1805	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1520	1-126-964-11	ELECT 10MF	20% 50V	C1806	1-104-665-11	ELECT 100MF	20% 25V
C1521	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1807	1-126-964-11	ELECT 10MF	20% 50V
C1523	1-163-243-11	CERAMIC CHIP 47PF	5% 50V	C1808	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1524	1-136-177-00	FILM 1MF	5% 50V	C1809	1-104-665-11	ELECT 100MF	20% 25V
C1525	1-104-665-11	ELECT 100MF	20% 25V	C1810	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1526	1-104-664-11	ELECT 47MF	20% 25V	C1811	1-104-665-11	ELECT 100MF	20% 25V
C1527	1-163-145-00	CERAMIC CHIP 0.0015MF	5% 50V	C1812	1-126-964-11	ELECT 10MF	20% 50V
C1528	1-163-145-00	CERAMIC CHIP 0.0015MF	5% 50V	C1813	1-104-666-11	ELECT 220MF	20% 25V
C1529	1-164-690-91	CERAMIC CHIP 0.0022MF	5% 50V	C1814	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C1530	1-104-664-11	ELECT 47MF	20% 16V	C1815	1-104-666-11	ELECT 220MF	20% 25V
C1531	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1816	1-126-964-11	ELECT 10MF	20% 50V
C1532	1-126-960-11	ELECT 1MF	20% 50V	C1817	1-126-964-11	ELECT 10MF	20% 50V
C1601	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C1818	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
C1602	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C1819	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C1603	1-130-495-00	FILM 0.1MF	5% 50V	C1820	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C1604	1-130-495-00	FILM 0.1MF	5% 50V	C1821	1-126-964-11	ELECT 10MF	20% 50V
C1605	1-107-715-11	ELECT 22MF	20% 50V	C1822	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C1606	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	C1823	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1607	1-137-370-11	FILM 0.01MF	5% 50V	C1824	1-164-005-11	CERAMIC CHIP 0.47MF	25V
C1610	1-126-960-11	ELECT 1MF	20% 50V	C1825	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
C1611	1-126-960-11	ELECT 1MF	20% 50V	C1826	1-104-665-11	ELECT 100MF	20% 25V
C1612	1-126-960-11	ELECT 1MF	20% 50V	C1827	1-104-664-11	ELECT 47MF	20% 25V
C1613	1-126-967-11	ELECT 47MF	20% 50V	C1828	1-104-664-11	ELECT 47MF	20% 25V
C1614	1-126-967-11	ELECT 47MF	20% 50V	C1829	1-104-664-11	ELECT 47MF	20% 25V
C1617	1-130-495-00	FILM 0.1MF	5% 50V	C1830	1-126-964-11	ELECT 10MF	20% 50V
C1618	1-130-495-00	FILM 0.1MF	5% 50V	<CONNECTOR>			
C1619	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	CN1501	* 1-564-506-11	PLUG, CONNECTOR 3P	
C1621	1-104-665-11	ELECT 100MF	20% 25V	CN1502	* 1-695-915-11	TAB (CONTACT)	
C1622	1-164-690-91	CERAMIC CHIP 0.0022MF	5% 50V	CN1601	* 1-564-508-11	PLUG, CONNECTOR 5P	
C1624	1-130-495-00	FILM 0.1MF	5% 50V	CN1604	* 1-564-507-11	PLUG, CONNECTOR 4P	
C1626	1-130-495-00	FILM 0.1MF	5% 50V	CN1605	* 1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P	
C1627	1-164-690-91	CERAMIC CHIP 0.0022MF	5% 50V	CN1606	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
C1628	1-126-964-11	ELECT 10MF	20% 50V	CN1701	* 1-564-511-11	PLUG, CONNECTOR 8P	
C1630	1-128-550-21	ELECT 2200MF	20% 50V	CN1702	* 1-564-516-11	PLUG, CONNECTOR 13P	
C1631	1-128-550-21	ELECT 2200MF	20% 50V	CN1703	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
C1632	1-104-664-11	ELECT 47MF	20% 25V	CN1705	* 1-564-505-11	PLUG, CONNECTOR 2P	
C1633	1-104-664-11	ELECT 47MF	20% 25V	CN1708	* 1-564-510-11	PLUG, CONNECTOR 7P	
C1634	1-126-961-11	ELECT 2.2MF	20% 50V	CN1801	* 1-695-299-11	CONNECTOR, BOARD TO BOARD 50P	
C1635	1-104-666-11	ELECT 220MF	20% 25V	CN1802	* 1-764-334-11	PLUG, CONNECTOR 11P	
C1650	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	CN1803	* 1-564-513-11	PLUG, CONNECTOR 10P	
C1651	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	CN1804	* 1-564-508-11	PLUG, CONNECTOR 5P	
C1701	1-126-964-11	ELECT 10MF	20% 50V	CN1805	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
C1702	1-126-964-11	ELECT 10MF	20% 50V	CN1806	* 1-779-890-11	CONNECTOR, BOARD TO BOARD 10P	
C1703	1-126-964-11	ELECT 10MF	20% 50V	CN1807	* 1-564-511-11	PLUG, CONNECTOR 8P	
C1704	1-126-964-11	ELECT 10MF	20% 50V	CN1808	* 1-564-510-11	PLUG, CONNECTOR 7P	
C1705	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	<DIODE>			
C1706	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	D1501	8-719-109-89	DIODE RD5.6ESB2	
C1707	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D1502	8-719-908-03	DIODE GP08D	
C1708	1-126-935-11	ELECT 470MF	20% 16V	D1503	8-719-908-03	DIODE GP08D	
C1709	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V	D1504	8-719-991-33	DIODE 1SS133T-77	
C1710	1-163-243-11	CERAMIC CHIP 47PF	5% 50V				
C1711	1-163-243-11	CERAMIC CHIP 47PF	5% 50V				
C1715	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
C1716	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				





REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D1505	8-719-988-61	DIODE 1SS355TE-17		JR1514	1-216-295-91	SHORT 0	
D1601	8-719-991-33	DIODE 1SS133T-77		JR1701	1-216-295-91	SHORT 0	
D1603	8-719-991-33	DIODE 1SS133T-77					
D1604	8-719-991-33	DIODE 1SS133T-77				<COIL>	
D1606	8-719-991-33	DIODE 1SS133T-77					
D1611	8-719-921-86	DIODE MTZJ-13		L1501	1-412-524-11	INDUCTOR 8.2UH	
				L1601	1-402-711-21	INDUCTOR 1UH	
D1612	8-719-991-33	DIODE 1SS133T-77		L1602	1-402-711-21	INDUCTOR 1UH	
D1613	8-719-921-86	DIODE MTZJ-13		L1701	1-408-603-31	INDUCTOR 10UH	
D1614	8-719-991-33	DIODE 1SS133T-77		L1702	1-408-598-31	INDUCTOR 3.9UH	
D1615	8-719-991-33	DIODE 1SS133T-77					
D1616	8-719-991-33	DIODE 1SS133T-77		L1801	1-408-603-31	INDUCTOR 10UH	
						<TRANSISTOR>	
D1617	8-719-403-00	DIODE MA3240-TX					
D1618	8-719-991-33	DIODE 1SS133T-77		Q1501	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1619	8-719-991-33	DIODE 1SS133T-77		Q1502	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
D1620	8-719-403-00	DIODE MA3240-TX		Q1503	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1621	8-719-403-00	DIODE MA3240-TX		Q1505	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q1601	8-729-027-56	TRANSISTOR DTC143TKA-T146	
D1622	8-719-403-00	DIODE MA3240-TX					
D1703	8-719-109-89	DIODE RD5.6ESB2		Q1602	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1704	8-719-109-89	DIODE RD5.6ESB2		Q1603	8-729-027-56	TRANSISTOR DTC143TKA-T146	
D1705	8-719-109-84	DIODE RD5.1ESB1		Q1604	8-729-027-56	TRANSISTOR DTC143TKA-T146	
D1706	8-719-109-84	DIODE RD5.1ESB1		Q1605	8-729-027-56	TRANSISTOR DTC143TKA-T146	
				Q1607	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1707	8-719-109-84	DIODE RD5.1ESB1					
D1708	8-719-109-84	DIODE RD5.1ESB1		Q1608	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1709	8-719-109-81	DIODE RD4.7ESB2		Q1609	1-801-806-11	TRANSISTOR DTC144EKA-T146	
D1710	8-719-109-81	DIODE RD4.7ESB2		Q1610	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
D1711	8-719-109-81	DIODE RD4.7ESB2		Q1611	8-729-027-56	TRANSISTOR DTC143TKA-T146	
				Q1612	8-729-027-56	TRANSISTOR DTC143TKA-T146	
D1712	8-719-109-81	DIODE RD4.7ESB2					
D1801	8-719-923-60	DIODE MTZJ-T-77-9.1A		Q1613	8-729-027-56	TRANSISTOR DTC143TKA-T146	
D1802	8-719-923-60	DIODE MTZJ-T-77-9.1A		Q1614	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
D1803	8-719-923-60	DIODE MTZJ-T-77-9.1A		Q1615	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D1804	8-719-923-60	DIODE MTZJ-T-77-9.1A		Q1616	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q1617	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
D1805	8-719-923-60	DIODE MTZJ-T-77-9.1A					
D1806	8-719-923-60	DIODE MTZJ-T-77-9.1A					
		<IC>					
IC1501	8-759-192-71	IC STV9379		Q1701	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1502	8-759-251-31	IC CA0007AM		Q1702	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1503	8-759-998-98	IC LM358D		Q1703	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1602	8-759-250-68	IC TDA7264		Q1704	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1603	8-759-502-21	IC TDA2822M		Q1705	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1701	8-752-895-09	IC CXP86213-002S		Q1706	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1702	8-759-527-76	IC M24C08-MN6T		Q1707	1-801-806-11	TRANSISTOR DTC144EKA-T146	
IC1703	8-759-100-96	IC uPC4558G2		Q1708	8-729-027-38	TRANSISTOR DTA144EKA-T146	
IC1704	8-759-100-96	IC uPC4558G2		Q1709	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1706	8-759-352-91	IC PST9143NL		Q1710	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1801	8-759-144-82	IC uPC2405HF		Q1711	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1802	8-759-095-63	IC PQ09RF2		Q1801	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1803	8-759-231-58	IC TA7812S		Q1802	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1804	8-759-069-28	IC PQ05RF11		Q1803	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC1805	8-759-100-96	IC uPC4558G2		Q1804	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<JACK>					
J1601	1-784-653-11	JACK, PHONO 2P (AUDIO OUT)		Q1805	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<CHIP CONDUCTOR>		Q1806	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JR1502	1-216-295-91	SHORT 0		Q1807	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JR1503	1-216-295-91	SHORT 0		Q1808	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
JR1504	1-216-295-91	SHORT 0		Q1809	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JR1505	1-216-295-91	SHORT 0					
JR1506	1-216-295-91	SHORT 0				<RESISTOR>	
JR1508	1-216-295-91	SHORT 0		R1501	1-216-353-00	METAL OXIDE 2.2 5% 1W F	
JR1510	1-216-295-91	SHORT 0		R1502	1-216-671-11	METAL CHIP 6.8K 0.50% 1/10W	
JR1511	1-216-295-91	SHORT 0		R1504	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
JR1512	1-216-295-91	SHORT 0		R1505	1-249-377-11	CARBON 0.47 5% 1/4W F	
JR1513	1-216-295-91	SHORT 0		R1506	1-215-888-00	METAL OXIDE 220 5% 2W F	
				R1507	1-216-081-00	RES,CHIP 22K 5% 1/10W	
				R1508	1-249-383-11	CARBON 1.5 5% 1/4W F	
				R1509	1-216-671-11	METAL CHIP 6.8K 0.50% 1/10W	
				R1510	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
				R1511	1-216-057-00	RES,CHIP 2.2K 5% 1/10W	
				R1512	1-216-085-00	RES,CHIP 33K 5% 1/10W	

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R1513	1-216-049-00	RES,CHIP	1K 5%	R1654	1-216-049-91	RES,CHIP	1K 5%
R1514	1-216-073-00	RES,CHIP	10K 5%				
R1515	1-216-073-00	RES,CHIP	10K 5%	R1655	1-216-073-00	RES,CHIP	10K 5%
R1516	1-216-073-00	RES,CHIP	10K 5%	R1656	1-216-295-00	SHORT	0
				R1701	1-216-065-00	RES,CHIP	4.7K 5%
R1517	1-216-081-00	RES,CHIP	22K 5%	R1702	1-216-065-00	RES,CHIP	4.7K 5%
R1518	1-216-353-00	METAL OXIDE	2.2 5%	R1703	1-216-065-00	RES,CHIP	4.7K 5%
R1519	1-216-073-00	RES,CHIP	10K 5%				
R1520	1-216-089-00	RES,CHIP	47K 5%	R1704	1-216-065-00	RES,CHIP	4.7K 5%
R1521	1-216-097-00	RES,CHIP	100K 5%	R1705	1-216-065-00	RES,CHIP	4.7K 5%
				R1706	1-216-065-00	RES,CHIP	4.7K 5%
R1522	1-216-089-91	RES,CHIP	47K 5%	R1707	1-216-025-00	RES,CHIP	100 5%
R1525	1-216-083-00	RES,CHIP	27K 5%	R1708	1-216-025-00	RES,CHIP	100 5%
R1526	1-216-083-00	RES,CHIP	27K 5%				
R1527	1-216-117-00	RES,CHIP	680K 5%	R1709	1-216-025-00	RES,CHIP	100 5%
R1528	1-216-117-00	RES,CHIP	680K 5%	R1710	1-216-049-00	RES,CHIP	1K 5%
				R1711	1-216-089-00	RES,CHIP	47K 5%
R1529	1-216-025-00	RES,CHIP	100 5%	R1712	1-216-073-00	RES,CHIP	10K 5%
R1530	1-216-097-00	RES,CHIP	100K 5%	R1713	1-216-089-00	RES,CHIP	47K 5%
R1531	1-216-089-00	RES,CHIP	47K 5%				
R1532	1-216-025-00	RES,CHIP	100 5%	R1714	1-216-073-00	RES,CHIP	10K 5%
R1533	1-249-377-11	CARBON	0.47 5%	R1715	1-216-089-00	RES,CHIP	47K 5%
				R1716	1-216-033-00	RES,CHIP	220 5%
R1534	1-216-089-91	RES,CHIP	47K 5%	R1717	1-216-089-00	RES,CHIP	47K 5%
R1537	1-216-073-00	RES,CHIP	10K 5%	R1718	1-216-057-00	RES,CHIP	2.2K 5%
R1538	1-216-083-00	RES,CHIP	27K 5%				
R1539	1-216-073-00	RES,CHIP	10K 5%	R1719	1-216-033-00	RES,CHIP	220 5%
R1540	1-216-091-00	RES,CHIP	56K 5%	R1720	1-216-033-00	RES,CHIP	220 5%
				R1721	1-216-033-00	RES,CHIP	220 5%
R1541	1-216-091-00	RES,CHIP	56K 5%	R1722	1-216-033-00	RES,CHIP	220 5%
R1542	1-216-093-91	RES,CHIP	68K 5%	R1725	1-216-065-00	RES,CHIP	4.7K 5%
R1543	1-216-093-91	RES,CHIP	68K 5%				
R1601	1-216-025-00	RES,CHIP	100 5%	R1726	1-216-295-00	SHORT	0
R1602	1-216-041-00	RES,CHIP	470 5%	R1727	1-216-033-00	RES,CHIP	220 5%
				R1728	1-216-025-00	RES,CHIP	100 5%
R1603	1-216-041-00	RES,CHIP	470 5%	R1729	1-216-025-00	RES,CHIP	100 5%
R1604	1-216-113-00	RES,CHIP	470K 5%	R1730	1-216-057-00	RES,CHIP	2.2K 5%
R1605	1-216-113-00	RES,CHIP	470K 5%				
R1606	1-249-397-11	CARBON	22 5%	R1731	1-216-033-00	RES,CHIP	220 5%
R1607	1-249-397-11	CARBON	22 5%	R1732	1-216-049-00	RES,CHIP	1K 5%
				R1733	1-216-049-00	RES,CHIP	1K 5%
R1608	1-249-425-11	CARBON	4.7K 5%	R1734	1-216-049-00	RES,CHIP	1K 5%
R1609	1-216-081-00	RES,CHIP	22K 5%	R1735	1-216-089-00	RES,CHIP	47K 5%
R1610	1-216-081-00	RES,CHIP	22K 5%				
R1611	1-249-425-11	CARBON	4.7K 5%	R1736	1-216-033-00	RES,CHIP	220 5%
R1614	1-216-357-00	METAL OXIDE	4.7 5%	R1737	1-216-033-00	RES,CHIP	220 5%
				R1738	1-216-025-00	RES,CHIP	100 5%
R1615	1-216-357-00	METAL OXIDE	4.7 5%	R1739	1-216-073-00	RES,CHIP	10K 5%
R1617	1-216-069-00	RES,CHIP	6.8K 5%	R1740	1-216-073-00	RES,CHIP	10K 5%
R1618	1-216-081-00	RES,CHIP	22K 5%				
R1620	1-216-065-00	RES,CHIP	4.7K 5%	R1741	1-216-033-00	RES,CHIP	220 5%
R1625	1-216-061-00	RES,CHIP	3.3K 5%	R1742	1-216-033-00	RES,CHIP	220 5%
				R1743	1-216-025-00	RES,CHIP	100 5%
R1626	1-216-061-00	RES,CHIP	3.3K 5%	R1744	1-216-033-00	RES,CHIP	220 5%
R1629	1-216-049-00	RES,CHIP	1K 5%	R1745	1-216-073-00	RES,CHIP	10K 5%
R1630	1-216-081-00	RES,CHIP	22K 5%				
R1631	1-249-389-11	CARBON	4.7 5%	R1746	1-216-025-00	RES,CHIP	100 5%
R1632	1-216-089-91	RES,CHIP	47K 5%	R1747	1-216-025-00	RES,CHIP	100 5%
				R1748	1-216-025-00	RES,CHIP	100 5%
R1633	1-216-089-91	RES,CHIP	47K 5%	R1749	1-216-033-00	RES,CHIP	220 5%
R1634	1-216-081-00	RES,CHIP	22K 5%	R1750	1-216-073-00	RES,CHIP	10K 5%
R1635	1-216-049-91	RES,CHIP	1K 5%				
R1636	1-216-075-00	RES,CHIP	12K 5%	R1751	1-216-033-00	RES,CHIP	220 5%
R1637	1-216-049-00	RES,CHIP	1K 5%	R1752	1-216-025-00	RES,CHIP	100 5%
				R1753	1-216-073-00	RES,CHIP	10K 5%
R1638	1-216-073-00	RES,CHIP	10K 5%	R1754	1-216-073-00	RES,CHIP	10K 5%
R1639	1-216-049-91	RES,CHIP	1K 5%	R1755	1-216-025-00	RES,CHIP	100 5%
R1640	1-216-025-00	RES,CHIP	100 5%				
R1641	1-216-065-00	RES,CHIP	4.7K 5%	R1756	1-216-073-00	RES,CHIP	10K 5%
R1642	1-216-049-00	RES,CHIP	1K 5%	R1757	1-216-073-00	RES,CHIP	10K 5%
				R1758	1-216-025-00	RES,CHIP	100 5%
R1643	1-216-073-00	RES,CHIP	10K 5%	R1759	1-216-073-00	RES,CHIP	10K 5%
R1644	1-216-075-00	RES,CHIP	12K 5%	R1760	1-216-073-00	RES,CHIP	10K 5%
R1645	1-216-041-00	RES,CHIP	470 5%				
R1648	1-249-381-11	CARBON	1 5%	R1762	1-216-065-00	RES,CHIP	4.7K 5%
R1649	1-216-089-00	RES,CHIP	47K 5%	R1763	1-216-666-11	METAL CHIP	4.3K 0.50%
				R1764	1-216-065-00	RES,CHIP	4.7K 5%
R1650	1-216-033-00	RES,CHIP	220 5%	R1765	1-216-073-00	RES,CHIP	10K 5%
R1651	1-216-073-00	RES,CHIP	10K 5%	R1766	1-216-049-91	RES,CHIP	1K 5%
R1652	1-216-099-00	RES,CHIP	120K 5%				
R1653	1-216-049-91	RES,CHIP	1K 5%	R1767	1-216-113-00	RES,CHIP	470K 5%

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION	REMARK
R1768	1-216-049-91	RES,CHIP 1K	5%
R1769	1-216-115-00	RES,CHIP 560K	5%
R1770	1-216-049-91	RES,CHIP 1K	5%
R1771	1-216-113-00	RES,CHIP 470K	5%
R1772	1-216-049-91	RES,CHIP 1K	5%
R1773	1-216-073-00	RES,CHIP 10K	5%
R1774	1-216-025-00	RES,CHIP 100	5%
R1775	1-216-115-00	RES,CHIP 560K	5%
R1778	1-216-049-91	RES,CHIP 1K	5%
R1786	1-216-025-00	RES,CHIP 100	5%
R1787	1-216-025-00	RES,CHIP 100	5%
R1788	1-216-025-00	RES,CHIP 100	5%
R1789	1-216-049-00	RES,CHIP 1K	5%
R1790	1-216-025-00	RES,CHIP 100	5%
R1791	1-216-025-00	RES,CHIP 100	5%
R1792	1-216-089-00	RES,CHIP 47K	5%
R1793	1-216-089-00	RES,CHIP 47K	5%
R1794	1-216-089-00	RES,CHIP 47K	5%
R1795	1-216-089-00	RES,CHIP 47K	5%
R1802	1-215-925-11	METAL OXIDE 22K	5%
R1803	1-216-073-00	RES,CHIP 10K	5%
R1804	1-216-113-00	RES,CHIP 470K	5%
R1805	1-216-113-00	RES,CHIP 470K	5%
R1806	1-216-023-00	RES,CHIP 82	5%
R1807	1-216-059-00	RES,CHIP 2.7K	5%
R1808	1-216-059-00	RES,CHIP 2.7K	5%
R1809	1-216-097-00	RES,CHIP 100K	5%
R1810	1-216-023-00	RES,CHIP 82	5%
R1811	1-216-025-00	RES,CHIP 100	5%
R1812	1-216-025-00	RES,CHIP 100	5%
R1813	1-216-049-00	RES,CHIP 1K	5%
R1814	1-216-023-00	RES,CHIP 82	5%
R1815	1-216-025-00	RES,CHIP 100	5%
R1816	1-216-025-00	RES,CHIP 100	5%
R1817	1-216-025-00	RES,CHIP 100	5%
R1818	1-216-059-00	RES,CHIP 2.7K	5%
R1819	1-216-059-00	RES,CHIP 2.7K	5%
R1820	1-216-059-00	RES,CHIP 2.7K	5%
R1821	1-216-025-00	RES,CHIP 100	5%
R1822	1-216-089-00	RES,CHIP 47K	5%
R1823	1-216-089-00	RES,CHIP 47K	5%
R1824	1-216-089-00	RES,CHIP 47K	5%
R1825	1-216-089-00	RES,CHIP 47K	5%
R1826	1-216-089-00	RES,CHIP 47K	5%
R1827	1-216-089-00	RES,CHIP 47K	5%
R1828	1-216-089-00	RES,CHIP 47K	5%
R1829	1-216-089-00	RES,CHIP 47K	5%
R1830	1-216-073-00	RES,CHIP 10K	5%
R1831	1-216-063-91	RES,CHIP 3.9K	5%
R1832	1-216-049-00	RES,CHIP 1K	5%
R1833	1-216-041-00	RES,CHIP 470	5%
R1834	1-216-049-00	RES,CHIP 1K	5%
R1835	1-216-049-00	RES,CHIP 1K	5%
R1836	1-216-049-00	RES,CHIP 1K	5%
R1837	1-216-049-00	RES,CHIP 1K	5%
R1838	1-216-041-00	RES,CHIP 470	5%
R1839	1-216-049-00	RES,CHIP 1K	5%
R1840	1-216-049-00	RES,CHIP 1K	5%
R1841	1-216-049-00	RES,CHIP 1K	5%
R1842	1-216-049-00	RES,CHIP 1K	5%
R1843	1-216-041-00	RES,CHIP 470	5%
R1844	1-216-049-00	RES,CHIP 1K	5%
R1845	1-216-049-00	RES,CHIP 1K	5%
R1846	1-216-049-00	RES,CHIP 1K	5%
R1847	1-216-049-00	RES,CHIP 1K	5%
R1848	1-216-049-00	RES,CHIP 1K	5%
R1849	1-216-041-00	RES,CHIP 470	5%

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<RELAY>	
RY1601	1-755-028-11	RELAY	
RY1602	1-755-028-11	RELAY	
		<TERMINAL BOARD>	
TB1601	1-694-303-11	TERMINAL, PUSH	
		<CRYSTAL>	
X1701	1-579-125-11	VIBRATOR, CERAMIC(8.0MHZ)	
*****			
	* A-1348-006-A	E BOARD, COMPLETE (41 inch MODEL)	
	*****		
	* A-1346-829-A	E BOARD, COMPLETE (48 inch MODEL)	
	*****		
	4-382-854-11	SCREW (M3X10), P, SW (+)	
	7-682-952-09	SCREW +PSW 3X16	
		<CAPACITOR>	
C502	1-126-959-11	ELECT 0.47MF	20% 50V
C505	1-130-471-00	FILM 0.001MF	5% 50V
C506	1-126-933-11	ELECT 100MF	20% 16V
C507	1-126-965-11	ELECT 22MF	20% 50V
C508	1-102-228-00	CERAMIC 470PF	10% 500V
C509	1-106-383-00	MYLAR 0.047MF	10% 200V
C511	1-130-475-00	MYLAR 0.0022MF	5% 50V
C512	1-136-479-11	FILM 0.001MF	5% 50V
C513	1-126-965-11	ELECT 22MF	20% 50V
C514	$\Delta$ 1-162-116-91	CERAMIC 680PF	10% 2KV
C515	$\Delta$ 1-125-831-91	FILM 0.033MF	3% 630V
C516	$\Delta$ 1-117-648-11	FILM 15000PF	3% 1.2KV
C518	1-130-495-00	FILM 0.1MF	5% 50V
C519	1-106-359-00	MYLAR 0.0047MF	10% 100V
C520	1-162-116-00	CERAMIC 680PF	10% 2KV
C521	1-162-116-00	CERAMIC 680PF	10% 2KV
C523	1-115-522-11	FILM 1MF	5% 250V
C524	1-106-359-00	MYLAR 0.0047MF	10% 100V
C526	1-102-228-00	CERAMIC 470PF	10% 500V
C527	1-126-970-11	ELECT 330MF	20% 50V
C528	1-107-957-11	ELECT 1MF	20% 250V
C529	1-109-844-11	FILM 0.68MF	5% 250V
C530	1-107-648-91	ELECT 100MF	20% 160V
C531	1-126-971-11	ELECT 470MF	20% 50V
C532	1-126-971-11	ELECT 470MF	20% 50V
C533	1-107-655-11	ELECT 47MF	20% 250V
C535	1-106-387-00	MYLAR 0.068MF	10% 200V
C536	1-137-374-11	FILM 0.047MF	5% 50V
C537	1-126-968-11	ELECT 100MF	20% 50V
C538	1-126-968-11	ELECT 100MF	20% 50V
C539	1-162-114-00	CERAMIC 0.0047MF	2KV
C540	1-137-372-11	FILM 0.022MF	5% 50V
C541	1-137-374-11	FILM 0.047MF	5% 50V
C542	1-126-934-11	ELECT 220MF	20% 16V
C544	1-104-665-11	ELECT 100MF	20% 25V
C545	1-104-665-11	ELECT 100MF	20% 25V
C548	1-102-244-00	CERAMIC 220PF	10% 500V
C550	1-126-935-11	ELECT 470MF	20% 16V
C551	1-126-935-11	ELECT 470MF	20% 16V
C554	1-130-062-91	FILM 0.0056MF	5% 630V
C555	1-126-960-11	ELECT 1MF	20% 50V

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**E**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C556	1-130-495-00	MYLAR	0.1MF 5% 50V	C867	1-104-664-11	ELECT	47MF 20% 25V
C701	1-126-933-11	ELECT	100MF 20% 16V	C868	1-164-096-11	CERAMIC	0.01MF 50V
C801	1-104-665-11	ELECT	100MF 20% 25V	C869	1-130-487-00	MYLAR	0.022MF 5% 50V
C802	1-104-665-11	ELECT	100MF 20% 25V	C870	1-164-096-11	CERAMIC	0.01MF 50V
C803	1-126-934-11	ELECT	220MF 20% 16V	C872	1-126-960-11	ELECT	1MF 20% 50V
C804	1-126-934-11	ELECT	220MF 20% 16V	C873	1-126-964-11	ELECT	10MF 20% 50V
C805	1-126-934-11	ELECT	220MF 20% 16V				(41 inch)
C806	1-126-934-11	ELECT	220MF 20% 16V	C884	1-104-664-11	ELECT	47MF 20% 25V
C807	1-137-374-11	FILM	0.047MF 5% 50V	C875	1-164-096-11	CERAMIC	0.01MF 50V
C808	1-137-374-11	FILM	0.047MF 5% 50V	C876	1-102-973-00	CERAMIC	100PF 5% 50V
C809	1-137-374-11	FILM	0.047MF 5% 50V	C877	1-102-973-00	CERAMIC	100PF 5% 50V
C810	1-137-374-11	FILM	0.047MF 5% 50V	C878	1-104-664-11	ELECT	47MF 20% 25V
C811	1-102-074-00	CERAMIC	0.001MF 10% 50V	C879	1-104-664-11	ELECT	47MF 20% 25V
C812	1-136-169-00	FILM	0.22MF 5% 50V	C880	1-104-664-11	ELECT	47MF 20% 25V
C813	1-137-374-11	FILM	0.047MF 5% 50V	C881	1-102-973-00	CERAMIC	100PF 5% 50V
C815	1-104-665-11	ELECT	100MF 20% 25V	C882	1-102-973-00	CERAMIC	100PF 5% 50V
C816	1-130-014-00	FILM	470PF 5% 50V	C883	1-102-973-00	CERAMIC	100PF 5% 50V
C817	1-104-664-11	ELECT	47MF 20% 25V	C884	1-104-665-11	ELECT	100MF 20% 25V
C818	1-126-933-11	ELECT	100MF 20% 16V	C885	1-104-664-11	ELECT	47MF 20% 25V
C819	1-104-664-11	ELECT	47MF 20% 25V	C886	1-102-973-00	CERAMIC	100PF 5% 50V
C820	1-102-129-00	CERAMIC	0.01MF 10% 50V	C887	1-102-973-00	CERAMIC	100PF 5% 50V
C821	1-130-495-00	MYLAR	0.1MF 5% 50V	C888	1-102-973-00	CERAMIC	100PF 5% 50V
C822	1-107-648-91	ELECT	100MF 20% 160V	C889	1-104-665-11	ELECT	100MF 20% 25V
C823	1-104-664-11	ELECT	47MF 20% 25V	C897	1-104-665-11	ELECT	100MF 20% 25V
C824	1-126-964-11	ELECT	10MF 20% 50V (41 inch)	C878	1-164-096-11	CERAMIC	0.01MF 50V
C825	1-104-665-11	ELECT	100MF 20% 25V	<CONNECTOR>			
C826	1-136-165-00	FILM	0.1MF 5% 50V	CN501	* 1-564-513-11	PLUG, CONNECTOR 10P	
C827	1-126-964-11	ELECT	10MF 20% 50V	CN502	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
C828	1-102-824-00	CERAMIC	470PF 5% 50V	CN503	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
C829	1-126-959-11	ELECT	0.47MF 20% 50V	CN504	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
C830	1-102-824-00	CERAMIC	470PF 5% 50V	CN505	* 1-506-371-00	PIN, CONNECTOR 2P	
C831	1-126-960-11	ELECT	1MF 20% 50V	CN506	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
C832	1-126-960-11	ELECT	1MF 20% 50V	CN507	* 1-564-507-11	PLUG, CONNECTOR 4P	
C833	1-126-960-11	ELECT	1MF 20% 50V	CN508	* 1-695-915-11	TAB (CONTACT)	
C834	1-126-968-11	ELECT	100MF 20% 50V	CN651	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
C835	1-126-967-11	ELECT	47MF 20% 50V	CN652	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
C836	1-136-169-00	FILM	0.22MF 5% 50V	CN801	* 1-564-507-11	PLUG, CONNECTOR 4P	
C837	1-126-963-11	ELECT	4.7MF 20% 50V	CN802	* 1-564-507-11	PLUG, CONNECTOR 4P	
C838	1-104-665-11	ELECT	100MF 20% 25V	CN803	* 1-564-507-11	PLUG, CONNECTOR 4P	
C839	1-137-374-11	FILM	0.047MF 5% 50V	CN804	* 1-779-892-11	CONNECTOR, BOARD TO BOARD 10P	
C840	1-104-665-11	ELECT	100MF 20% 25V	CN805	* 1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P	
C841	1-137-374-11	FILM	0.047MF 5% 50V	CN806	* 1-508-765-00	PIN, CONNECTOR (5mm PITCH) 3P	
C842	1-137-374-11	FILM	0.047MF 5% 50V	CN807	* 1-564-509-11	PLUG, CONNECTOR 6P	
C843	1-104-664-11	ELECT	47MF 20% 25V	CN808	* 1-573-986-11	PIN, CONNECTOR (PC BOARD) 5P	
C844	1-126-933-11	ELECT	100MF 20% 16V	CN810	* 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
C845	1-126-933-11	ELECT	100MF 20% 16V	<DIODE>			
C846	1-126-933-11	ELECT	100MF 20% 16V	D501	8-719-991-33	DIODE 1SS133T-77	
C847	1-126-933-11	ELECT	100MF 20% 16V	D502	8-719-991-33	DIODE 1SS133T-77	
C848	1-126-933-11	ELECT	100MF 20% 16V	D503	8-719-991-33	DIODE 1SS133T-77	
C849	1-102-973-00	CERAMIC	100PF 5% 50V	D504	8-719-921-63	DIODE MTZJ-7.5B	
C850	1-102-973-00	CERAMIC	100PF 5% 50V	D507	8-719-302-43	DIODE EL1Z	
C851	1-137-374-11	FILM	0.047MF 5% 50V	D508	8-719-900-26	DIODE ERD29-08J	
C852	1-137-374-11	FILM	0.047MF 5% 50V	D509	8-719-945-80	DIODE ERC06-15S	
C853	1-137-374-11	FILM	0.047MF 5% 50V	D510	8-719-991-33	DIODE 1SS133T-77	
C854	1-126-933-11	ELECT	100MF 20% 16V	D511	8-719-302-43	DIODE EL1Z	
C855	1-102-973-00	CERAMIC	100PF 5% 50V	D512	8-719-991-33	DIODE 1SS133T-77	
C856	1-102-973-00	CERAMIC	100PF 5% 50V	D513	8-719-302-43	DIODE EL1Z	
C857	1-126-933-11	ELECT	100MF 20% 16V	D514	8-719-908-03	DIODE GP08D	
C858	1-104-665-11	ELECT	100MF 20% 25V	D515	8-719-908-03	DIODE GP08D	
C859	1-104-665-11	ELECT	100MF 20% 25V	D517	8-719-018-82	DIODE RGP02-20EL-6394	
C860	1-126-933-11	ELECT	100MF 20% 16V	D519	8-719-991-33	DIODE 1SS133T-77	
C861	1-137-374-11	FILM	0.047MF 5% 50V	D520	8-719-302-43	DIODE EL1Z	
C862	1-137-374-11	FILM	0.047MF 5% 50V	D521	8-719-302-43	DIODE EL1Z	
C863	1-137-374-11	FILM	0.047MF 5% 50V				
C864	1-126-933-11	ELECT	100MF 20% 16V				
C865	1-137-366-11	FILM	0.0022MF 5% 50V				
C866	1-136-177-00	FILM	1MF 5% 50V				



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E

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R550	1-247-807-31	CARBON	100	5%	1/4W	R820	1-249-437-11	CARBON	47K	5%	1/4W
R551	1-249-437-11	CARBON	47K	5%	1/4W	R821	1-249-431-11	CARBON	15K	5%	1/4W
R552	1-247-807-31	CARBON	100	5%	1/4W	R822	1-249-417-11	CARBON	1K	5%	1/4W
						R823	1-249-417-11	CARBON	1K	5%	1/4W
R553	1-247-881-00	CARBON	120K	5%	1/4W	R824	1-215-462-00	METAL	51K	1%	1/4W
R554	1-249-405-11	CARBON	100	5%	1/4W						
R555	1-247-807-31	CARBON	100	5%	1/4W	R825	1-249-441-11	CARBON	100K	5%	1/4W
R556	1-260-099-11	CARBON	1K	5%	1/2W	R826	1-215-462-00	METAL	51K	1%	1/4W
R557	1-216-490-11	METAL OXIDE	39K	5%	3W	R827	1-216-474-11	METAL OXIDE	82	5%	3W
						R828	1-249-426-11	CARBON	5.6K	5%	1/4W
R558	1-216-490-11	METAL OXIDE	39K	5%	3W	R829	1-249-426-11	CARBON	5.6K	5%	1/4W
R559	1-216-490-11	METAL OXIDE	39K	5%	3W						
R560	8-719-991-33	DIODE ISS133T-77				R830	1-249-414-11	CARBON	560	5%	1/4W
R562	1-202-838-00	SOLID	100K	10%	1/2W	R831	1-249-414-11	CARBON	560	5%	1/4W
R563	1-215-447-00	METAL	12K	1%	1/4W	R832	1-249-441-11	CARBON	100K	5%	1/4W
						R833	1-216-474-11	METAL OXIDE	82	5%	3W
R565	1-247-807-31	CARBON	100	5%	1/4W	R834	1-249-441-11	CARBON	100K	5%	1/4W
R566	1-249-377-11	CARBON	0.47	5%	1/4W						
R567	1-249-388-11	METAL OXIDE	0.82	5%	3W	R835	1-249-441-11	CARBON	100K	5%	1/4W
R568	1-247-903-00	CARBON	1M	5%	1/4W	R836	1-247-807-31	CARBON	100	5%	1/4W
R569	1-216-388-11	METAL OXIDE	0.82	5%	3W	R837	1-249-441-11	CARBON	100K	5%	1/4W
						R838	1-249-421-11	CARBON	2.2K	5%	1/4W
R570	1-215-910-00	METAL OXIDE	68	5%	3W	R839	1-247-807-31	CARBON	100	5%	1/4W
R571	1-249-422-11	CARBON	2.7K	5%	1/4W						
R572	1-247-895-91	CARBON	470K	5%	1/4W	R841	1-247-815-91	CARBON	220	5%	1/4W
R573	1-249-438-11	CARBON	56K	5%	1/4W	R842	1-247-807-31	CARBON	100	5%	1/4W
R574	1-249-435-11	CARBON	33K	5%	1/4W	R843	1-247-807-31	CARBON	100	5%	1/4W
						R844	1-247-807-31	CARBON	100	5%	1/4W
R576	1-247-807-31	CARBON	100	5%	1/4W	R845	1-249-441-11	CARBON	100K	5%	1/4W
R577	1-249-422-11	CARBON	2.7K	5%	1/4W						
R578	1-215-473-00	METAL	150K	1%	1/4W	R846	1-247-807-31	CARBON	100	5%	1/4W
					(41 inch)	R847	1-215-481-00	METAL	330K	1%	1/4W
R579	1-247-889-00	CARBON	270K	5%	1/4W	R848	1-215-449-00	METAL	15K	1%	1/4W
R580	1-249-437-11	CARBON	47K	5%	1/4W	R850	1-215-481-00	METAL	330K	1%	1/4W
						R851	1-247-807-31	CARBON	100	5%	1/4W
R581	1-249-437-11	CARBON	47K	5%	1/4W						
R583	1-249-428-11	CARBON	8.2K	5%	1/4W	R852	1-247-807-31	CARBON	100	5%	1/4W
R584	1-249-429-11	CARBON	10K	5%	1/4W	R853	1-247-887-00	CARBON	220K	5%	1/4W
R585	1-216-490-11	METAL OXIDE	39K	5%	3W	R854	1-249-429-11	CARBON	10K	5%	1/4W
R586	1-215-892-11	METAL OXIDE	1K	5%	2W	R856	1-247-807-31	CARBON	100	5%	1/4W
						R857	1-247-807-31	CARBON	100	5%	1/4W
R588	1-247-863-91	CARBON	22K	5%	1/4W						
R589	1-247-887-00	CARBON	220K	5%	1/4W	R858	1-215-455-00	METAL	27K	1%	1/4W
R591	1-249-425-11	CARBON	4.7K	5%	1/4W	R859	1-215-455-00	METAL	27K	1%	1/4W
R595	1-215-464-00	METAL	62K	1%	1/4W	R860	1-215-455-00	METAL	27K	1%	1/4W
					(41 inch)	R861	1-215-455-00	METAL	27K	1%	1/4W
R596	1-215-473-00	METAL	150K	1%	1/4W	R862	1-215-455-00	METAL	27K	1%	1/4W
					(41 inch)						
R597	1-215-464-00	METAL	62K	1%	1/4W	R863	1-215-455-00	METAL	27K	1%	1/4W
					(41 inch)	R865	1-249-424-11	CARBON	3.9K	5%	1/4W
R701	1-215-449-00	METAL	15K	1%	1/4W	R866	1-249-437-11	CARBON	47K	5%	1/4W
R702	1-249-421-11	CARBON	2.2K	5%	1/4W						(41 inch)
R703	1-249-421-11	CARBON	2.2K	5%	1/4W	R867	1-215-455-00	METAL	27K	1%	1/4W
R704	1-215-457-00	METAL	33K	1%	1/4W	R868	1-215-443-00	METAL	8.2K	1%	1/4W
R705	1-215-457-00	METAL	33K	1%	1/4W	R869	1-249-425-11	CARBON	4.7K	5%	1/4W
R706	1-215-457-00	METAL	33K	1%	1/4W	R870	1-249-437-11	CARBON	47K	5%	1/4W
R801	1-247-807-31	CARBON	100	5%	1/4W						(41 inch)
R802	1-247-807-31	CARBON	100	5%	1/4W	R871	1-249-417-11	CARBON	1K	5%	1/4W
R803	1-249-430-11	CARBON	12K	5%	1/4W	R872	1-249-425-11	CARBON	4.7K	5%	1/4W
						R873	1-247-807-31	CARBON	100	5%	1/4W
R804	1-249-425-11	CARBON	4.7K	5%	1/4W						
R805	1-247-807-31	CARBON	100	5%	1/4W	R874	1-249-435-11	CARBON	33K	5%	1/4W
R806	1-249-429-11	CARBON	10K	5%	1/4W	R875	1-249-441-11	CARBON	100K	5%	1/4W
R807	1-247-807-31	CARBON	100	5%	1/4W	R877	1-249-422-11	CARBON	2.7K	5%	1/4W
R808	1-249-429-11	CARBON	10K	5%	1/4W						(41 inch)
						R878	1-215-469-00	METAL	100K	1%	1/4W
R809	1-249-425-11	CARBON	4.7K	5%	1/4W						(41 inch)
R810	1-247-807-31	CARBON	100	5%	1/4W	R879	1-215-445-00	METAL	10K	1%	1/4W
R811	1-247-807-31	CARBON	100	5%	1/4W						
R813	1-247-863-91	CARBON	22K	5%	1/4W	R881	1-249-408-11	CARBON	180	5%	1/4W
					(48inch )	R882	1-249-429-11	CARBON	10K	5%	1/4W
R814	1-247-807-31	CARBON	100	5%	1/4W	R883	1-249-429-11	CARBON	10K	5%	1/4W
						R884	1-215-445-00	METAL	10K	1%	1/4W
R815	1-247-807-31	CARBON	100	5%	1/4W	R885	1-249-441-11	CARBON	100K	5%	1/4W
R816	1-247-807-31	CARBON	100	5%	1/4W						
R817	1-247-807-31	CARBON	100	5%	1/4W	R886	1-249-428-11	CARBON	8.2K	5%	1/4W
R818	1-249-429-11	CARBON	10K	5%	1/4W	R887	1-247-807-31	CARBON	100	5%	1/4W
					(48inch )	R888	1-247-807-31	CARBON	100	5%	1/4W
R819	1-247-807-31	CARBON	100	5%	1/4W	R889	1-249-439-11	CARBON	68K	5%	1/4W
						R890	1-249-441-11	CARBON	100K	5%	1/4W

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

**E** **H1**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R891	1-247-843-11	CARBON	3.3K 5%	R954	1-215-433-00	METAL	3.3K 1%
R892	1-249-425-11	CARBON	4.7K 5%	R955	1-215-433-00	METAL	3.3K 1%
R893	1-249-421-11	CARBON	2.2K 5%	R956	1-249-429-11	CARBON	10K 5%
R894	1-215-455-00	METAL	27K 1%	R957	1-214-800-11	METAL	2.2 1%
R895	1-249-421-11	CARBON	2.2K 5%	R958	1-214-800-11	METAL	2.2 1%
R896	1-249-441-11	CARBON	100K 5%	R959	1-215-433-00	METAL	3.3K 1%
R897	1-247-807-31	CARBON	100 5%	R961	1-249-425-11	CARBON	4.7K 5%
R898	1-247-815-91	CARBON	220 5%	R962	1-214-800-11	METAL	2.2 1%
R900	1-216-474-11	METAL OXIDE	82 5%	R963	1-214-800-11	METAL	2.2 1%
R901	1-215-449-00	METAL	15K 1%	R964	1-215-433-00	METAL	3.3K 1%
R902	1-215-449-00	METAL	15K 1%	R965	1-215-433-00	METAL	3.3K 1%
R903	1-215-421-00	METAL	1K 1%	R966	1-247-815-91	CARBON	220 5%
R904	1-214-800-11	METAL	2.2 1%	R967	1-215-455-00	METAL	27K 1%
R905	1-214-800-11	METAL	2.2 1%	R968	1-215-455-00	METAL	27K 1%
R906	1-214-800-11	METAL	2.2 1%	R969	1-215-455-00	METAL	27K 1%
R908	1-215-445-00	METAL	10K 1%	R970	1-215-455-00	METAL	27K 1%
R909	1-215-421-00	METAL	1K 1%	R971	1-215-455-00	METAL	27K 1%
R910	1-215-421-00	METAL	1K 1%	R972	1-215-455-00	METAL	27K 1%
R911	1-215-461-00	METAL	47K 1%	R973	1-214-800-11	METAL	2.2 1%
R912	1-215-445-00	METAL	10K 1%	R974	1-215-455-00	METAL	27K 1%
R913	1-215-455-00	METAL	27K 1%	R975	1-214-800-11	METAL	2.2 1%
R914	1-215-455-00	METAL	27K 1%	R976	1-215-433-00	METAL	3.3K 1%
R915	1-215-455-00	METAL	27K 1%	R978	1-215-443-00	METAL	8.2K 1%
R916	1-215-455-00	METAL	27K 1%	R979	1-249-425-11	CARBON	4.7K 5%
R917	1-215-455-00	METAL	27K 1%	R980	1-247-815-91	CARBON	220 5%
R918	1-215-455-00	METAL	27K 1%	R981	1-247-815-91	CARBON	220 5%
R919	1-249-435-11	CARBON	33K 5%	R982	1-215-469-00	METAL	100K 1%
R920	1-214-800-11	METAL	2.2 1%	R983	1-247-815-91	CARBON	220 5%
R921	1-249-429-11	CARBON	10K 5%	R984	1-215-445-00	METAL	10K 1%
R922	1-215-445-00	METAL	10K 1%	R985	1-249-429-11	CARBON	10K 5%
R923	1-249-425-11	CARBON	4.7K 5%	R986	1-215-449-00	METAL	15K 1%
R924	1-215-445-00	METAL	10K 1%	R987	1-249-408-11	CARBON	180 5%
R925	1-249-425-11	CARBON	4.7K 5%	R988	1-249-429-11	CARBON	10K 5%
R926	1-249-408-11	CARBON	180 5%	R989	1-249-425-11	CARBON	4.7K 5%
R927	1-249-429-11	CARBON	10K 5%	R990	1-249-431-11	CARBON	15K 5%
R928	1-249-429-11	CARBON	10K 5%	R991	1-249-429-11	CARBON	10K 5%
R929	1-214-800-11	METAL	2.2 1%	R993	1-249-425-11	CARBON	4.7K 5%
R930	1-214-800-11	METAL	2.2 1%	R994	1-216-474-11	METAL OXIDE	82 5%
R931	1-215-445-00	METAL	10K 1%	R997	1-215-445-00	METAL	10K 1%
R933	1-215-445-00	METAL	10K 1%	R998	1-249-425-11	CARBON	4.7K 5%
R934	1-249-422-11	CARBON	2.7K 5%	R999	1-249-425-11	CARBON	4.7K 5%
R935	1-249-429-11	CARBON	10K 5%	R1901	1-249-439-11	CARBON	68K 5%
R936	1-249-429-11	CARBON	10K 5%	R1904	1-249-425-11	CARBON	4.7K 5%
R937	1-249-437-11	CARBON	47K 5%	<SPARK GAP>			
R938	1-215-421-00	METAL	1K 1%	SG501	1-519-422-11	GAP, SPARK	
R939	1-259-878-11	CARBON	1.5M 5%	<TRANSFORMER>			
R940	1-249-441-11	CARBON	100K 5%	T501	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
R941	1-249-441-11	CARBON	100K 5%	T502	$\Delta$ 1-431-211-11	TRANSFORMER, FERRITE (PMT)	
R942	1-249-421-11	CARBON	2.2K 5%	T504	$\Delta$ 1-453-331-21	FBT ASSY, NX-4012//M3T4	
R943	1-249-441-11	CARBON	100K 5%	*****			
R944	1-215-421-00	METAL	1K 1%	* A-1372-518-A H1 BOARD, MOUNT *****			
R945	1-249-437-11	CARBON	47K 5%	<CAPACITOR>			
R946	1-215-421-00	METAL	1K 1%	C3003	1-126-157-11	ELECT	10MF 20% 16V
R947	1-249-441-11	CARBON	100K 5%				
R948	1-247-815-91	CARBON	220 5%				
R949	1-247-807-31	CARBON	100 5%				
R950	1-247-807-31	CARBON	100 5%				
R951	1-247-807-31	CARBON	100 5%				
R952	1-247-807-31	CARBON	100 5%				
R953	1-249-437-11	CARBON	47K 5%				
R953	1-249-439-11	CARBON	39K 5%				

H1 UG H2 ZR

REF. NO.	PART NO.	DESCRIPTION	REMARK
<CONNECTOR>			
CN3001	* 1-564-519-11	PLUG, CONNECTOR 4P	
CN3002	* 1-564-525-11	PLUG, CONNECTOR 10P	
CN3003	* 1-580-690-11	PIN, CONNECTOR (PC BOARD) 4P	
CN3004	* 1-691-292-11	PIN, CONNECTOR (PC BOARD) 3P	
<DIODE>			
D3002	8-719-992-06	DIODE SLA-580LT3F	
<IC>			
IC3002	8-742-014-11	HYB IC SBX1981-51	
<TRANSISTOR>			
Q3002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
<RESISTOR>			
R3001	1-216-683-11	METAL CHIP 22K	0.50% 1/10W
R3002	1-216-675-11	METAL CHIP 10K	0.50% 1/10W
R3006	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W
R3007	1-216-661-11	METAL CHIP 2.7K	0.50% 1/10W
R3009	1-216-041-00	RES,CHIP 470	5% 1/10W
R3010	1-216-045-00	RES,CHIP 680	5% 1/10W
<SWITCH>			
S3001	1-692-431-21	SWITCH, TACTIL (PROG +)	
S3002	1-692-431-21	SWITCH, TACTIL (PROG -)	
S3003	1-692-431-21	SWITCH, TACTIL (VOL +)	
S3004	1-692-431-21	SWITCH, TACTIL (VOL -)	
S3005	1-692-431-21	SWITCH, TACTIL (TV/VIDEO)	
S3006	△ 1-571-434-21	SWITCH, PUSH (AC POWER)	

*****			
* A-1373-691-A UG BOARD, MOUNT			
*****			
<CAPACITOR>			
C2901	1-126-933-11	ELECT 100MF	20% 16V
C2902	1-126-964-11	ELECT 10MF	20% 50V
C2903	1-126-964-11	ELECT 10MF	20% 50V
C2904	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C2905	1-126-964-11	ELECT 10MF	20% 50V
C2906	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
C2907	1-126-964-11	ELECT 10MF	20% 50V
<CONNECTOR>			
CN2901	* 1-564-521-11	PLUG, CONNECTOR 6P	
CN2902	* 1-564-519-11	PLUG, CONNECTOR 4P	
<DIODE>			
D2901	8-719-977-22	DIODE DTZ9.1	
D2902	8-719-977-22	DIODE DTZ9.1	
D2903	8-719-977-22	DIODE DTZ9.1	
D2904	8-719-977-22	DIODE DTZ9.1	
D2905	8-719-977-22	DIODE DTZ9.1	

REF. NO.	PART NO.	DESCRIPTION	REMARK
<JACK>			
J2901	1-784-654-11	JACK BLOCK, PIN (DVD IN)	
<RESISTOR>			
R2901	1-216-022-00	RES,CHIP 75	5% 1/10W
R2902	1-216-033-00	RES,CHIP 220	5% 1/10W
R2903	1-216-022-00	RES,CHIP 75	5% 1/10W
R2904	1-216-033-00	RES,CHIP 220	5% 1/10W
R2905	1-216-022-00	RES,CHIP 75	5% 1/10W
R2906	1-216-033-00	RES,CHIP 220	5% 1/10W
R2907	1-216-113-00	RES,CHIP 470K	5% 1/10W
R2908	1-216-113-00	RES,CHIP 470K	5% 1/10W
*****			
* A-1375-177-A H2 BOARD, COMPLETE			
*****			
<CAPACITOR>			
C3203	1-126-157-11	ELECT 10MF	20% 16V
C3204	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
C3205	1-163-037-11	CERAMIC CHIP 0.022MF	10% 50V
<CONNECTOR>			
CN3201	* 1-564-519-11	PLUG, CONNECTOR 4P	
CN3202	* 1-564-526-31	PLUG, CONNECTOR 11P	
CN3204	* 1-564-520-11	PLUG, CONNECTOR 5P	
<JACK>			
J3201	1-784-658-11	TERMINAL BLOCK, S (S-VIDEO IN)	
J3202	1-507-806-00	JACK 1P (HEAD PHONE)	
<COIL>			
L3201	1-408-615-31	INDUCTOR 100UH	
L3202	1-408-615-31	INDUCTOR 100UH	
<TRANSISTOR>			
Q3201	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
<RESISTOR>			
R3201	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W
R3202	1-216-025-00	RES,CHIP 100	5% 1/10W
R3203	1-216-025-00	RES,CHIP 100	5% 1/10W
R3204	1-216-661-11	METAL CHIP 2.7K	0.50% 1/10W
R3205	1-216-654-11	METAL CHIP 1.3K	0.50% 1/10W
R3206	1-216-675-11	METAL CHIP 10K	0.50% 1/10W
R3207	1-216-654-11	METAL CHIP 1.3K	0.50% 1/10W
R3208	1-216-073-00	RES,CHIP 10K	5% 1/10W
R3209	1-216-033-00	RES,CHIP 220	5% 1/10W
R3210	1-216-033-00	RES,CHIP 220	5% 1/10W
R3211	1-216-033-00	RES,CHIP 220	5% 1/10W
R3212	1-216-033-00	RES,CHIP 220	5% 1/10W
<SWITCH>			
S3201	1-692-431-21	SWITCH, TACTIL (MENU)	
S3202	1-692-431-21	SWITCH, TACTIL (MENU +)	
S3203	1-692-431-21	SWITCH, TACTIL (MENU -)	
S3204	1-692-431-21	SWITCH, TACTIL (ENTER)	
S3205	1-692-431-21	SWITCH, TACTIL (AUTO CONVER)	



The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION	REMARK
S3206	1-571-532-21	SWITCH, TACTIL (AUTO PROGR)	
*****			
* A-1391-078-A ZR BOARD, MOUNT *****			
<CONNECTOR>			
CN1401	* 1-564-510-11	PLUG, CONNECTOR 7P	
CN1403	* 1-564-506-11	PLUG, CONNECTOR 3P	
CN1404	* 1-564-507-11	PLUG, CONNECTOR 4P	
CN1405	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
<CONNECTOR>			
DY1401 $\Delta$	1-451-454-41	DEFLECTION YOKE (R)	
<RESISTOR>			
R1401	1-249-414-11	CARBON 560	5% 1/4W
R1402	1-249-414-11	CARBON 560	5% 1/4W
R1403	1-215-916-00	METAL OXIDE 680	5% 3W F
R1415	1-216-475-11	METAL OXIDE 120	5% 3W F
R1418	1-216-475-11	METAL OXIDE 120	5% 3W F
*****			
* A-1391-079-A ZG BOARD, MOUNT *****			
4-382-854-11	SCREW (M3X10), P, SW (+)		
<CAPACITOR>			
C1431	1-102-508-91	CERAMIC 10PF	0.50PF 50V
C1432	1-126-935-11	ELECT 470UF	20% 16V
C1433	1-107-364-11	MYLAR 0.01MF	10% 200V
C1434	1-107-364-11	FILM 0.01MF	10% 200V
C1435	1-107-667-11	ELECT 2.2MF	20% 160V
C1436	1-130-471-00	FILM 0.001MF	5% 50V
C1437	1-130-471-00	FILM 0.001MF	5% 50V
C1438	1-107-364-11	FILM 0.01MF	10% 200V
C1439	1-161-830-00	CERAMIC 0.0047MF	500V
C1440	1-104-664-11	ELECT 47MF	20% 25V
C1441	1-137-380-11	MYLAR 0.47MF	5% 50V
C1443	1-126-935-11	ELECT 470MF	20% 16V
C1444	1-107-648-91	ELECT 100MF	20% 160V
C1445	1-126-935-11	ELECT 470MF	20% 16V
C1446	1-126-935-11	ELECT 470MF	20% 16V
<CONNECTOR>			
CN1431	* 1-564-508-11	PLUG, CONNECTOR 5P	
CN1432	* 1-564-510-11	PLUG, CONNECTOR 7P	
CN1433	* 1-564-507-11	PLUG, CONNECTOR 4P	
CN1434	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN1461	* 1-564-506-11	PLUG, CONNECTOR 3P	
CN1462	* 1-564-507-11	PLUG, CONNECTOR 4P	
CN1463	* 1-564-505-31	PLUG, CONNECTOR 2P	
CN1464	* 1-564-507-11	PLUG, CONNECTOR 4P	
<DIODE>			
D1431	8-719-924-11	DIODE MTZJ-T-77-22	
D1432	8-719-924-11	DIODE MTZJ-T-77-22	
D1433	8-719-991-33	DIODE 1SS133T-77	

REF. NO.	PART NO.	DESCRIPTION	REMARK
D1434	8-719-991-33	DIODE 1SS133T-77	
D1435	8-719-991-33	DIODE 1SS133T-77	
D1436	8-719-991-33	DIODE 1SS133T-77	
D1437	8-719-991-33	DIODE 1SS133T-77	
<CONNECTOR>			
DY1431 $\Delta$	1-451-454-41	DEFLECTION YOKE (G)	
<COIL>			
L1431	1-410-478-11	INDUCTOR 47UH	
<TRANSISTOR>			
Q1431	8-729-044-61	TRANSISTOR 2SC4793(LB52SONY)	
Q1432	8-729-044-59	TRANSISTOR 2SA1837(LB52SONY)	
Q1433	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
Q1434	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q1435	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q1436	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q1437	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
Q1438	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
<RESISTOR>			
R1431	1-249-414-11	CARBON 560	5% 1/4W
R1432	1-249-414-11	CARBON 560	5% 1/4W
R1433	1-249-377-11	CARBON 0.47	5% 1/4W F
R1435	1-216-475-11	METAL OXIDE 120	5% 3W F
R1436	1-216-475-11	METAL OXIDE 120	5% 3W F
R1437	1-249-415-11	CARBON 680	5% 1/4W
R1438	1-215-451-00	METAL 18K	1% 1/4W
R1439	1-215-451-00	METAL 18K	1% 1/4W
R1440	1-249-415-11	CARBON 680	5% 1/4W F
R1442	1-247-815-91	CARBON 220	5% 1/4W
R1443	1-249-377-11	CARBON 0.47	5% 1/4W F
R1444	1-247-807-31	CARBON 100	5% 1/4W
R1445	1-215-417-00	CARBON 680	5% 1/4W
R1446	1-249-401-11	CARBON 47	5% 1/4W
R1447	1-249-401-11	CARBON 47	5% 1/4W
R1448	1-249-417-11	CARBON 1K	5% 1/4W
R1449	1-215-389-00	METAL 47	1% 1/4W
R1450	1-249-425-11	CARBON 4.7K	5% 1/4W
R1451	1-249-409-11	CARBON 220	5% 1/4W
R1452	1-249-413-11	CARBON 470	5% 1/4W
R1454	1-260-310-71	CARBON 33	5% 1/2W
R1455	1-249-383-11	CARBON 1.5	5% 1/4W F
R1457	1-249-417-11	CARBON 1K	5% 1/4W F
R1458	1-249-383-11	CARBON 1.5	5% 1/4W F
R1459	1-249-399-11	CARBON 33	5% 1/4W F
R1460	1-215-916-00	METAL OXIDE 680	5% 3W F
R1461	1-249-414-11	CARBON 560	5% 1/4W
R1462	1-249-414-11	CARBON 560	5% 1/4W
R1463	1-249-429-11	CARBON 10K	5% 1/4W
R1465	1-216-475-11	METAL OXIDE 120	5% 3W F
R1468	1-216-475-11	METAL OXIDE 120	5% 3W F
*****			
* A-1390-891-A S BOARD, MOUNT *****			
<CAPACITOR>			
C2201	1-104-664-11	ELECT 47MF	20% 16V

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C2224	1-126-933-11	ELECT 100MF	20% 16V	R2224	1-216-085-00	RES,CHIP	33K 5% 1/10W
C2227	1-163-129-00	CERAMIC CHIP 330PF	5% 50V	R2225	1-216-085-00	RES,CHIP	33K 5% 1/10W
C2228	1-126-959-11	ELECT 0.47MF	20% 50V	R2226	1-216-295-00	SHORT	0
C2229	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	R2227	1-216-049-00	RES,CHIP	1K 5% 1/10W
C2230	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V	R2228	1-216-089-00	RES,CHIP	47K 5% 1/10W
C2231	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V	R2230	1-216-075-00	RES,CHIP	12K 5% 1/10W
C2232	1-164-222-11	CERAMIC CHIP 0.22MF	25V	R2231	1-216-099-00	RES,CHIP	120K 5% 1/10W
C2233	1-164-222-11	CERAMIC CHIP 0.22MF	25V	R2232	1-216-097-00	RES,CHIP	100K 5% 1/10W
C2234	1-126-960-11	ELECT 1MF	20% 50V	R2233	1-216-089-00	RES,CHIP	47K 5% 1/10W
C2235	1-126-960-11	ELECT 1MF	20% 50V	R2234	1-216-081-00	RES,CHIP	22K 5% 1/10W
C2236	1-163-129-00	CERAMIC CHIP 330PF	5% 50V	R2235	1-216-097-00	RES,CHIP	100K 5% 1/10W
C2251	1-126-960-11	ELECT 1MF	20% 50V	R2236	1-216-081-00	RES,CHIP	22K 5% 1/10W
C2252	1-126-960-11	ELECT 1MF	20% 50V	R2237	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
C2253	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V	R2238	1-216-081-00	RES,CHIP	22K 5% 1/10W
C2254	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V	R2239	1-216-081-00	RES,CHIP	22K 5% 1/10W
C2255	1-126-964-11	ELECT 10MF	20% 50V	R2240	1-216-081-00	RES,CHIP	22K 5% 1/10W
C2256	1-163-038-00	CERAMIC CHIP 0.1MF	25V	R2241	1-216-081-00	RES,CHIP	22K 5% 1/10W
C2257	1-126-933-11	ELECT 100MF	20% 16V	R2242	1-216-081-00	RES,CHIP	22K 5% 1/10W
C2258	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V	R2243	1-216-081-00	RES,CHIP	22K 5% 1/10W
C2259	1-163-989-11	CERAMIC CHIP 0.033MF	10% 25V	R2244	1-216-081-00	RES,CHIP	22K 5% 1/10W
C2260	1-126-960-11	ELECT 1MF	20% 50V	R2245	1-216-073-00	RES,CHIP	10K 5% 1/10W
C2261	1-163-038-00	CERAMIC CHIP 0.1MF	25V	R2246	1-216-079-00	RES,CHIP	18K 5% 1/10W
C2262	1-163-038-00	CERAMIC CHIP 0.1MF	25V	R2247	1-216-073-00	RES,CHIP	10K 5% 1/10W
C2263	1-163-038-00	CERAMIC CHIP 0.1MF	25V	R2248	1-216-079-00	RES,CHIP	18K 5% 1/10W
C2264	1-126-960-11	ELECT 1MF	20% 50V	R2249	1-216-073-00	RES,CHIP	10K 5% 1/10W
<CONNECTOR>				R2250	1-216-073-00	RES,CHIP	10K 5% 1/10W
CN2201	* 1-770-748-11	CONNECTOR, BOARD TO BOARD 12P		R2251	1-216-073-00	RES,CHIP	10K 5% 1/10W
<IC>				R2252	1-216-073-00	RES,CHIP	10K 5% 1/10W
IC2201	8-752-058-68	IC CXA1315M		R2253	1-216-065-00	RES,CHIP	4.7K 5% 1/10W
IC2202	8-759-009-06	IC MC14052BF		R2254	1-216-063-91	RES,CHIP	3.9K 5% 1/10W
IC2203	8-759-100-96	IC uPC4558G2		R2255	1-216-097-00	RES,CHIP	100K 5% 1/10W
IC2204	8-759-100-96	IC uPC4558G2		R2256	1-216-097-00	RES,CHIP	100K 5% 1/10W
IC2205	8-759-100-96	IC uPC4558G2		R2257	1-216-081-00	RES,CHIP	22K 5% 1/10W
IC2206	8-759-100-96	IC uPC4558G2		R2258	1-216-089-00	RES,CHIP	47K 5% 1/10W
IC2207	8-759-100-96	IC uPC4558G2		R2259	1-216-099-00	RES,CHIP	120K 5% 1/10W
IC2208	8-759-496-02	IC NJM2150D		R2260	1-216-089-00	RES,CHIP	47K 5% 1/10W
IC2211	8-759-009-06	IC MC14052BF		R2261	1-216-077-00	RES,CHIP	15K 5% 1/10W
<TRANSISTOR>				R2262	1-216-085-00	RES,CHIP	33K 5% 1/10W
Q4	1-801-806-11	TRANSISTOR DTC144EKA-T146		R2263	1-216-085-00	RES,CHIP	33K 5% 1/10W
<RESISTOR>				R2264	1-216-083-00	RES,CHIP	27K 5% 1/10W
R2201	1-216-073-00	RES,CHIP	10K 5% 1/10W	R2265	1-216-085-00	RES,CHIP	33K 5% 1/10W
R2202	1-216-073-00	RES,CHIP	10K 5% 1/10W	R2266	1-216-295-00	SHORT	0
R2203	1-216-073-00	RES,CHIP	10K 5% 1/10W	R2267	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2204	1-216-025-00	RES,CHIP	100 5% 1/10W	R2268	1-216-085-00	RES,CHIP	33K 5% 1/10W
R2205	1-216-025-00	RES,CHIP	100 5% 1/10W	R2269	1-216-071-00	RES,CHIP	8.2K 5% 1/10W
R2206	1-216-073-00	RES,CHIP	10K 5% 1/10W	R2270	1-216-085-00	RES,CHIP	33K 5% 1/10W
R2207	1-216-049-00	RES,CHIP	1K 5% 1/10W	R2271	1-216-071-00	RES,CHIP	8.2K 5% 1/10W
R2208	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R2272	1-216-085-00	RES,CHIP	33K 5% 1/10W
R2209	1-216-081-00	RES,CHIP	22K 5% 1/10W	R2274	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2210	1-216-081-00	RES,CHIP	22K 5% 1/10W	R2275	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2211	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R2276	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2212	1-216-065-00	RES,CHIP	4.7K 5% 1/10W	R2277	1-216-073-00	RES,CHIP	10K 5% 1/10W
R2213	1-216-081-00	RES,CHIP	22K 5% 1/10W	R2281	1-216-049-00	RES,CHIP	1K 5% 1/10W
R2214	1-216-081-00	RES,CHIP	22K 5% 1/10W	R2283	1-216-295-00	SHORT	0
R2216	1-216-073-00	RES,CHIP	10K 5% 1/10W	R2284	1-216-073-00	RES,CHIP	10K 5% 1/10W
R2217	1-216-073-00	RES,CHIP	10K 5% 1/10W				
R2218	1-216-083-00	RES,CHIP	27K 5% 1/10W				
R2219	1-216-049-00	RES,CHIP	1K 5% 1/10W				
R2222	1-216-081-00	RES,CHIP	22K 5% 1/10W				
R2223	1-216-083-00	RES,CHIP	27K 5% 1/10W				

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
*****							
MISCELLANEOUS							
*****							
	$\Delta$ 1-223-925-11	RESISTOR ASSY (FOCUS PACK)					
	1-251-372-21	BOOSTER, RF					
	$\Delta$ 1-451-454-61	DEFLECTION YOKE (B)					
	$\Delta$ 1-452-790-11	NECK ASSY					
	$\Delta$ 1-452-909-31	MAGNET ASSY, 4 POLE					
	1-505-426-21	SPEAKER (10.6 CM) (41 inch)					
	1-528-864-11	BATTERY, SOLAR					
	1-529-404-11	SPEAKER (5CM) (48 inch)					
	1-529-405-11	SPEAKER (16CM) (48 inch)					
	* 1-555-400-00	CABLE, PIN					
	$\Delta$ 1-574-062-61	CORD, POWER (WITH CONNECTOR)					
		2.5A/250V (GE/ME MODEL)					
	$\Delta$ 1-574-358-51	CORD, POWER (WITH CONNECTOR)					
		(AUS MODEL)					
	$\Delta$ 8-598-955-12	BLOCK ASSY, HIGH-VOLTAGE					
	$\Delta$ 8-733-570-15	PICTURE TUBE 07MXC2(G)(HEATER)					
		(48 inch)					
	$\Delta$ 8-733-572-15	PICTURE TUBE 07MXC3(R)(HEATER)					
		(48 inch)					
	$\Delta$ 8-733-575-15	PICTURE TUBE 07MAC3(B)(DIAPHRAGM)					
		(48 inch)					
	$\Delta$ A-1501-775-A	PICTURE TUBE MECHASEAL ASSY					
		(R), SLIM (41 inch)					
	$\Delta$ A-1501-776-A	PICTURE TUBE MECHASEAL ASSY					
		(G), SLIM (41 inch)					
	$\Delta$ A-1501-777-A	PICTURE TUBE MECHASEAL ASSY					
		(B), SLIM (41 inch)					
*****							
ACCESSORIES AND PACKING MATERIALS							
*****							
	$\Delta$ 1-569-008-21	ADAPTOR, CONVERSION 2P					
		(GE/ME MODEL)					
	3-861-923-81	MANUAL, INSTRUCTION					
		(ENGLISH,FRENCH)					
	* 4-029-168-01	BAG, PROTECTION (41 inch)					
	* 4-030-895-01	JOINT					
	* 4-041-423-11	SHEET, PROTECTION					
	* 4-060-976-01	BAG, PROTECTION (48 inch)					
	* 4-065-646-01	CUSHION (UPPER) (ASSY) (41 inch)					
	* 4-065-647-01	CUSHION (LOWER) (ASSY) (41 inch)					
	* 4-065-652-02	BOARD, TOP (41 inch)					
	* 4-065-730-01	TRAY (41 inch)					
	* 4-069-898-01	INDIVIDUAL CARTON (48 inch)					
	* 4-069-899-01	TRAY (48 inch)					
	* 4-069-900-01	BOARD, TOP (48 inch)					
	* 4-069-901-01	BOARD, BOTTOM (48 inch)					
	* 4-070-211-01	INDIVIDUAL CARTON (41 inch)					
	* 4-076-804-01	CUSHION (UPPER) (ASSY) (48 inch)					
	* 4-079-385-01	CUSHION (LOWER) (ASSY) (48 inch)					
REMOTE COMMANDER							
*****							
	1-473-978-21	REMOTE COMMANDER (RM-871)					
	4-978-977-01	COVER, BATTERY (FOR RM-871)					

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